KONICA MINOLTA

REGIUS CONSOLE

CS-3

OPERATION MANUAL

CODE NO. 0862

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⚠ Mammo Use is not approved in the United States of America.

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Foreword

Thank you for purchasing "Regius Console CS-3"(hereinforth referred to as CS-3).
The CS-3 is a console (controller) that can be commonly shared and utilized by REGIUS Product Series. With the CS-3, it becomes possible to integrally control the examination flow including the registration of patient information / examination information as well as the overall verification of the final radiographic image, and thus a comfortable environment with an efficient work flow can be secured.
In this manual, safety precautions and operational procedures are described to allow the users of the CS-3 to be fully familiarized with the potential of the CS-3. The manual should be at all times be kept in a readily accessible place for easy reference. Should you loose this manual, please contact your Service Representative for the new one.

Features

1. Two types of cassette registration method are available.

Depending on the operational environment or device layout, you can select from 2 types of cassette registration method, i.e. "Registration with a bar code reader (at the time of exposure)" and "Manual registration using a screen menu (at the time of cassette reading)".

2. Capable of controlling multiple readers.

Various reader devices for upright studies and cassette reading can be simultaneously controlled by a single CS-3. This enables efficient flow of image verification from either reader device without disturbing the exposure workflow.

3. Multiple Reader Input

Even with multiple cassette readers (REGIUS MODEL 170/190), the image read by any reader in the system will be displayed on the CS-3 by which the objective cassette was registered. This feature realizes highly reliable image identification as well as efficient use of readers.

4. Real Time Display

The image read by each reader will be displayed in real time in synchronization with the reader operation. Therefore image verification is instantaneous.

5. ID Registration

In the case that patient registration is made at each X-ray room, the operator can search the patient information or examination information via "Examination Search Screen". On the other hand, when the facility has a separate reception, the operator can display and browse the registered Examination Information and Patient Information using "Examination List" screen. In this case, use of an ID Registration System will be necessary.

< Cautions >

(1) Unauthorized reproduction of this manual in whole or in part is prohibited.
(2) The content of this manual is subject to change without prior notice.
(3) Should any discrepancies, errors or omissions be discovered, KONICA MINOLTA should be contacted.
(4) Notwithstanding Item (3) above, KONICA MINOLTA shall accept no responsibility for any claims made against loss or loss of profits arising from use of the product.

Trademarks

- "Microsoft" and "Windows" are trademarks or registered trademarks of Microsoft Corporation (America) valid in America and other countries.
- "Windows 2000" is the abbreviation of "Microsoft / Windows 2000 Professional Operating System.
- Other company or product names used in this manual are trademarks or registered trademarks. The indications ”©”, ”®” and ”™” shall be omitted henceforth.

About this Manual

Be sure to read this chapter before using this manual.

How to use this manual

Structure of this manual

This manual consists of the chapters listed below.

Chapter1	**Safety Precautions & Warnings** When using the REGIUS Console CS-3, the cautions detailed in this chapter must be strictly followed in order to correctly use the device.
Chapter2	**Operation** The operation of CS-3 is described in this chapter.
Chapter3	**Sequence of Examination** This chapter describes the sequence of examination using CS-3.
Chapter4	**Description of Screens** This chapter describes each of the CS-3 screens.
Chapter5	**Troubleshooting** This chapter describes typical methods of trouble shooting and the error message list displayed on CS-3.
Chapter6	**Optional Functions** The operation of optional functions available for CS-3 is described in this chapter.
Chapter7	**Operation of Optional Equipment** This chapter describes how to operate the optional equipments for the CS-3.
Chapter8	**Care & Maintenance** This chapter details the procedure for care and maintenance of the CS-3.
Specification	This chapter details the specification of the CS-3.
Index	The index describes special terminology used in the CS-3 User's Manual.

Notes on Device Identification

Upright/Cassette in this manual denote Upright Reader (REGIUS 350/370) and Cassette Reader (REGIUS 190/170) respectively.
CS-3 Control Unit and CS-3 Operation Unit denote the following devices.

CS-3 Control Unit

Implements control of the reader devices, image data processing and output of image data. CS-3 Control Unit can be interfaced to reader devices in the configuration where maximum one Upright Reader (REGIUS MODEL 350/370) and 16 REGIUS Cassette Readers (REGIUS MODEL 170/190) at a time.

CS-3 Operation Unit

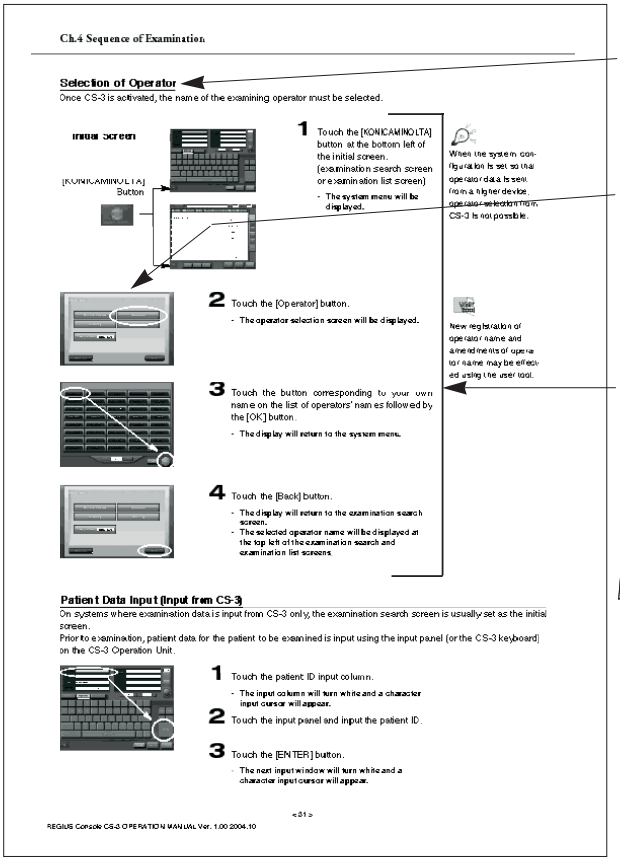
Comprised of LCD for display and touch panel that is incorporated in the LCD surface, allowing inputs of various data and checks on the image data. A desk-stand is provided as an accessory.

Page Layout

Hint
Points to be noted.

Caution
Cautions for operating the machine. Details should be carefully noted.

User Tool
Settings or other things to be made through the User Tool.
Contact your system administrator to change the settings using the user tool.


Ch.4 Sequence of Examination
Selection of Operator
Once CS-3 is activated, the name of the examining operator must be selected.
Initial Screen
[KONICAMINOLTA] Button
1 Touch the [KONICAMINOLTA] button at the bottom left of the initial screen. (examination search screen or examination list screen)
- The system menu will be displayed.
When the system configuration is set so that operator data is sent from a higher device, operator selection from CS-3 is not possible.
2 Touch the [Operator] button.
- The operator selection screen will be displayed.
New registration of operator name and amendments of operator name may be effected using the user tool.
3 Touch the button corresponding to your own name on the list of operators' names followed by the [OK] button.
- The display will return to the system menu.
4 Touch the [Back] button.
- The display will return to the examination search screen.
- The selected operator name will be displayed at the top left of the examination search and examination list screens.
Patient Data Input (Input from CS-3)
On systems where examination data is input from CS-3 only, the examination search screen is usually set as the initial screen.
Prior to examination, patient data for the patient to be examined is input using the input panel (or the CS-3 keyboard) on the CS-3 Operation Unit.
1 Touch the patient ID input column.
- The input column will turn white and a character input cursor will appear.
2 Touch the input panel and input the patient ID.
3 Touch the [ENTER] button.
- The next input window will turn white and a character input cursor will appear.
<51>
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Title
This title stands for the general meanings for the descriptions.

Display
Display with the operational procedure is shown.

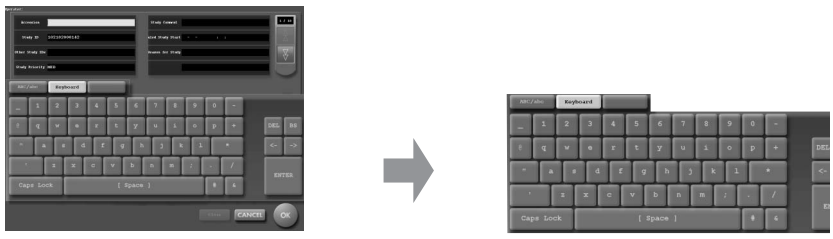
Operation Procedure
Operation procedure is explained in order.

Technical Term
Technical terms are explained.

Reference
Shows reference pages or sections. See the page for more details.

Display in this manual

In this manual, the unnecessary area of the display may be trimmed away.



Parenthesis in a sentence.

The word in this mark shows that it is displayed in the touch panel of the CS-3 operation unit. → Ex. "Ready"

The word in this mark shows that it is the name of the button to be pushed or touched. → Ex. [Complete] Button

1 Safety Precautions & Warnings

When using the REGIUS Console CS-3, the cautions detailed in this chapter must be strictly followed in order to correctly use the device.

Alert and Symbol Marks

Safety Alert Symbol

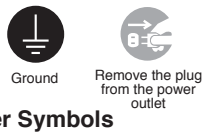
This is the safety alert symbol and is intended to draw the attention of the user to potential dangers to the user him/herself or to others that may arise during the use or operation of this system.
These messages must be read thoroughly and strictly observed.
All safety related precautions should be carefully read and fully understood before proceeding with assembly or usage of this system.

Description of Graphic Symbols

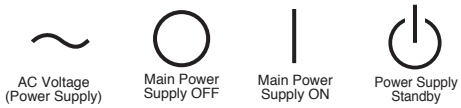
Symbols indicating the need for caution (including danger and warnings)

Symbols indicating prohibited acts

Symbols indicating essential acts (compulsory or indicated acts)



Other Symbols



Warning Text (Signal Word)

Signal words indicate the degree of potential hazards in the product.

There are 3 degrees of caution labels, and each is used depending on the level of risk and damage caused by incorrect use and mishandling.

DANGER : Failure to observe the caution will produce high risk of serious or fatal injury.

WARNING : Failure to observe the caution will produce moderate risk of serious or fatal injury.

CAUTION : Failure to observe the caution will produce moderate risk of serious or fatal injury or damage to property.

		Risk of the damage	
		High	Low
Bodily injury□ (and damage to property)	Loss of life or serious injury□ (Damage is serious)□	DANGER	WARNING
	Moderate damage or light injury□ (Damage is light)	WARNING or CAUTION	CAUTION
Damage to property only		CAUTION	

NOTE : If the contents of this page are not legible, order a new manual.

Cautions for Handling the CS-3

Following cautions must be observed when handling the CS-3 and followed in order to handle the CS-3 in a correct manner. Before using the CS-3, thoroughly read this operation manual, and become fully familiar with the operation of the CS-3.

CAUTION

CS-3 is classified as Class B Information Technologies Equipment based on the standard prescribed by VCCI (Voluntary Control Council of Interference by Information Technology Equipment).
Use of this product may cause electromagnetic disturbance. In such cases, the user may be requested to take necessary actions to remedy the problem.

High-Frequency Compliance Product
CS-3 complies with the guideline prescribed by the Ministry of International Trade and Industry for prevention of electromagnetic disturbance caused by home and general electric appliances.

Data Handling
The manufacturer of CS-3 cannot be held liable for the loss of important data such as patient's data as a result of installing the CS-3 at the facility.

Cautions for Computer Virus
Be careful not to introduce computer virus to the CS-3 whether it is used as stand alone or in connection to the network.

Disposal
Disposal of the CS-3 must be carried out following the cautions listed below. Especially, the lead battery incorporated in the main unit as an emergency power source is defined as industrial waste, and requires a special care for disposal.

CAUTION

Cautions when disposing of the product
When disposing of the following used parts, accept the regulations of each local government.

1)The CS-3 (Operation Unit and Control Unit).
2)The packaging materials for the CS-3 (Operation Unit and Control Unit).
3)The lead and lithium batteries inside the CS-3 Control Unit, which can be hazardous and must be disposed of properly.
4)The optional bar code reader.

Be certain to comply with any and all laws and government regulations including electric codes and utility regulations, regarding the installation and operation of this equipment.

CD-RW drive is exclusively for the service engineer's use to carry out the maintenance service.
Users are requested not to use this drive for any purpose.

Devices that the user purchased from the supply source other than Konica Minolta cannot be connected to the CS-3.

Software that the user purchased from the supply source other than Konica Minolta cannot be installed on the CS-3.

NOTE : If the contents of this page are not legible, order a new manual.

Overall Cautions

⚠ WARNING

- **The unit must not be used if smoke, unusual odors or sounds are detected.**
  In the event of detection of smoke, unusual odors or sounds, the power should be switched off immediately and the power plug disconnected from the power outlet. Then contact your Service Representative. Continued use under such circumstances could result in fire.
- **Do not insert wire or metal blades.**
  Do not insert wire, metal blades or other foreign objects into the floppy disk slot; there is a danger of electrocution.
- **Be certain to comply with any and all laws and government regulations including electric codes and utility regulations, regarding the installation and operation of this equipment.**

⚠ CAUTION

- **Do not introduce water or other foreign objects into the CS-3.**
  Do not introduce foreign objects such as water or other liquids, pins or clips into the CS-3: fire, electrocution or damage may result. In the event of accidental introduction of such foreign objects or substances into the unit, the power should be switched off immediately and the power plug disconnected from the power outlet. No attempts should be made to disassemble the unit. Then contact your Service Representative.

⚠ CAUTION

- **Shutdown or removal of the disk from the CS-3 should be implemented only after confirming that the access lamp of the CS-3's hard disk is extinguished.**
- **When recycling the power of the CS-3, leave it for minimum 10 seconds after power OFF, and then turn the power ON.**
- **When relocating the CS-3, which may cause vibration to the device, wait for 30 seconds or more after the shutdown to start moving the device.**
- **Regularly clean the CS-3.**
  Regular cleaning helps to avoid various malfunctions in advance.

NOTE : If the contents of this page are not legible, order a new manual.

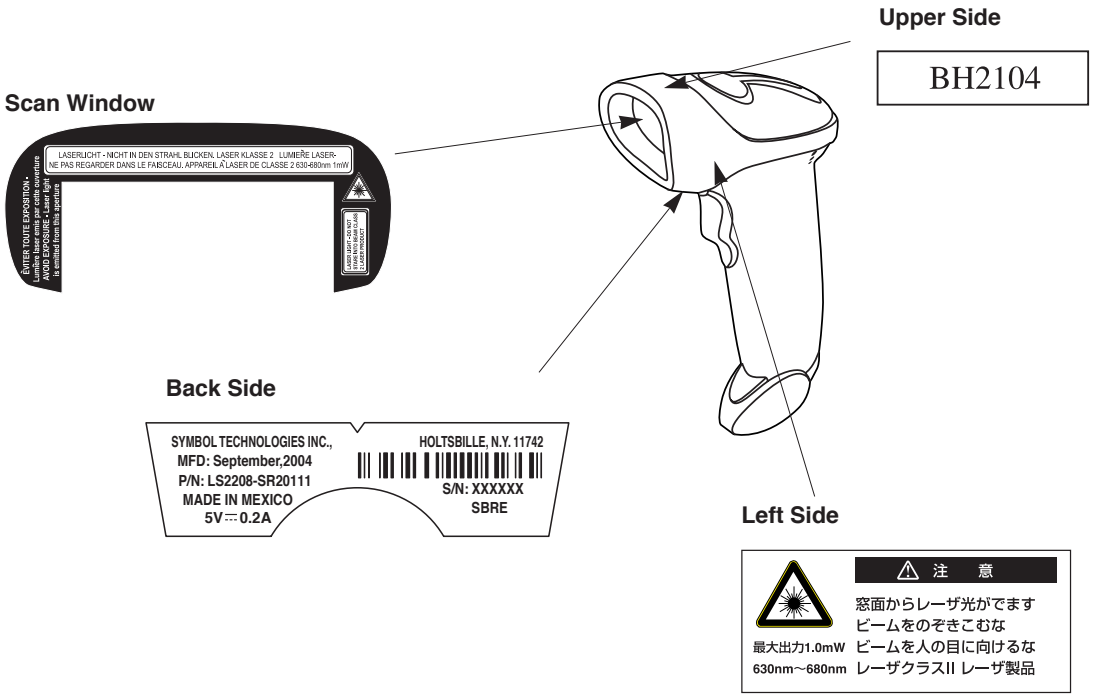
Cautions Relating to Handling Single Bar Code Reader

The single bar code reader (option) conforms to the CDRH Class II Laser Products. Be sure to follow the description below when handling the bar code reader.

⚠ CAUTION

- **The laser beams will be radiated from the window on the front of the reader. Never look at the laser beam directly; this may cause serious damage to the eyes.**
- **Do not direct the laser beam to the eyes; this may cause serious damage to the eyes.**
- **The laser beams may be radiated while disassembling. Do not disassemble the bar code reader.**
- **Be careful to ensure that the reading window does not become cracked or scratched. Any cracks or scratches may result in lowered levels of performance or malfunction.**

The caution label illustrated below is stuck on the bar code reader.



Safety Acquisition Standard

Item	Specification
Laser Safety Standard	Conforms to CDRH Class Ⅱ Conforms to IEC Class Ⅱ
Electricity Safety Regulations	Conforms to UL, CSA, CE (EMC), CTICK, GS Conforms to VCCI Class B Conforms to FCC Part15 Class B

NOTE : If the contents of this page are not legible, order a new manual.

Ergonomic Recommendations

Caution: In order to avoid or minimize the potential risk of ergonomic injury follow the recommendations below. Consult with your local Health & Safety Manager to ensure that you are adhering to your company's safety programs to prevent employee injury.

- Reduce or eliminate repetitive motion
- Maintain a natural position
- Reduce or eliminate excessive force
- Keep objects that are used frequently within easy reach
- Perform tasks at correct heights
- Reduce or eliminate vibration
- Reduce or eliminate direct pressure
- Provide adjustable workstations
- Provide adequate clearance
- Provide a suitable working environment
- Improve work procedures.

Regulatory Information

Radio Frequency Interference Requirements

This device has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the Federal Communications Commissions Rules and Regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.
This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with FCC Part 15. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Radio Frequency Interference Requirements - Canada

This Class B digital apparatus complies with Canadian ICES-003.

NOTE : If the contents of this page are not legible, order a new manual.

CE Marking and European Union Compliance

Products intended for sale within the European Union are marked with the CE Mark which indicates compliance to applicable Directives and European Norms (EN), as follows.

Amendments to these Directives or ENs are included:

Applicable Directives

- Electromagnetic Compatibility Directive 89/336/EEC
- Low Voltage Directive 73/23/EEC

Applicable Standards

- EN 55022:1998, Limits and Methods of Measurement of Radio Disturbance Characteristics of Information Technology Equipment
- EN 55024:1998; Information Technology equipment -Immunity characteristics - Limits and methods of measurement
- IEC 1000-4-2:1995; Electromagnetic compatibility(EMC); Part 4:Testing and measurement techniques;Section 4.2:Electrostatic discharge immunity test
- IEC 1000-4-3:1997; Electromagnetic Compatibility(EMC); Part 4:Testing and measurement techniques;Section 3. Radiated, radio frequency, electromagnetic field immunity test.
- IEC 1000-4-4:1995; Electromagnetic compatibility(EMC); Part 4: Testing and measurement techniques;Section 4:Testing electrical fast transient,/Burst immunity.
- IEC1000-4-5:1995; Electromagnetic compatibility(EMC), Part 4: Testing and measurement techniques;Section 5: Surge Immunity
- IEC 1000-4-6:1996; Electromagnetic compatibility(EMC), Part 4:Testing and measurement techniques;Section 6: Immunity to conducted disturbances, induced by radio frequency fields.
- IEC 1000-4-11:1994; Electromagnetic compatibility(EMC), Part 4: Testing and measurement techniques;Section 11: Voltage Dips, Short Interruptions, and Voltage Variations.
- EN 60 950 + A1+A2+A3+A4+A11 - Safety of Information Technology Equipment Including Electrical Business Equipment
- EN 60 825-1 (EN 60 825) - Safety of Devices Containing Lasers

Laser Devices

Symbol products using lasers comply with US 21CFR1040.10, and IEC825-1:1993, EN60825-1:1994+A11:1996. The laser classification is marked on one of the labels on the product.

Caution: Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure.

Class 2 laser scanners use a low power, visible light diode. As with any very bright light source, such as the sun, the user should avoid staring directly into the light beam. Momentary exposure to a Class 2 laser is not known to be harmful.

NOTE : If the contents of this page are not legible, order a new manual.

In accordance with Clause 5, IEC 0825 and EN60825, the following information is provided to the user:

ENGLISH
CLASS 2 LASER LIGHT
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

DANISH / DANSK
KLASSE 2 LASERLYF
SE IKKE IND I STRÅEN
KLASSE 2 LASERPRODUKT

DUTCH / NEDERLANDS
KLASSE 2 LASERLICHT
NIET IN STRAAL STAREN
KLASSE-2 LASERPRODUKT

FINNISH / SUOMI
LUOKKA 2 LASERVALO
ÄLÄ TUIJOTA SÄDETTÄ
LUOKKA 2 LASERTUOTE

SPANISH / ESPANOL
CLASE 2 LUZ LASER
NO MIRE FIJAMENTE EL HAZ
PRODUCTO LASER DE LA CLASE 2

GERMAN / DEUTCH
KLASSE 2 LASERSTRAHLEN
NICHT DIREKT IN DEN LASERSTRAHL SCHAUEN
LASERPRODUKT DER KLASSE 2

SWEDISH / SVENSKA
KLASS 2 LASERLJUS STIRRA INTE MOT STRÅEN
LASERPRODUKT KLASS 2

HEBREW
רמה 2 אור לייזר
אין להביט אל תוך הזרם
מוצר לייזר רמה 2

ITALIAN / ITALIANO
CLASSE 2 LUCE LASER
NON FISSARE IL RAGGIOPRODOTTO
AL LASER DI CLASSE 2

NORWEGIAN / NORSK
KLASSE 2 LASERLYS IKKE STIRR INN I LYSSTRÅLEN
LASERPRODUKT, KLASSE 2

PORTUGUESE / PORTUGUÊS
CLASSE 2 LUZ DE LASER NÃO FIXAR O RAIO LUMINOSO
PRODUTO LASER DA CLASSE 2

FRENCH / FRANÇAIS
CLASSE 2 LUMIERE LASER
NE PAS REGARDER LE RAYON FIXEMENT
PRODUIT LASER DE CLASSE 2

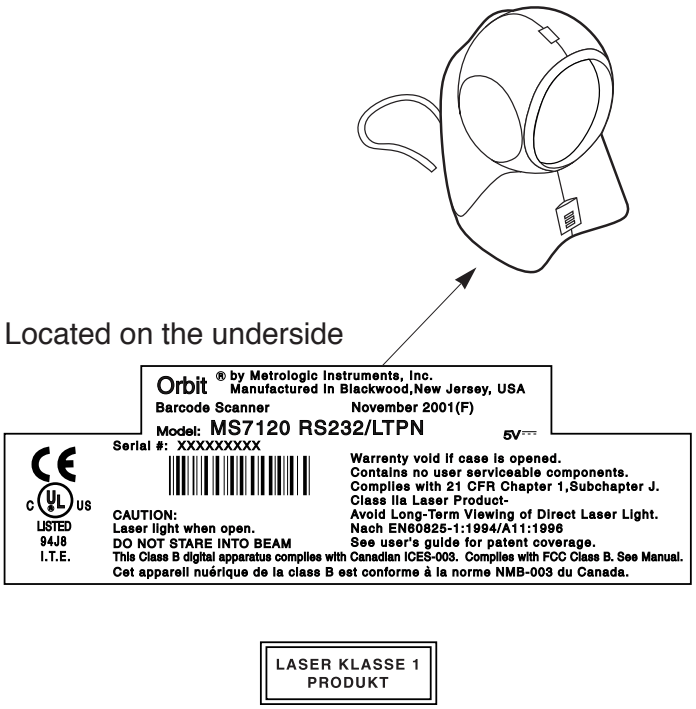
NOTE : If the contents of this page are not legible, order a new manual.

Cautions Relating to Handling Multi Bar Code Reader

The Multi bar code reader (option) conforms to the CDRH Class II a Laser Products. Be sure to follow the description below when handling the bar code reader.

⚠ CAUTION

- **The laser beams will be radiated from the window on the front of the reader. Never look at the laser beam directly; this may cause serious damage to the eyes.**
- **Do not direct the laser beam to the eyes; this may cause serious damage to the eyes.**
- **The laser beams may be radiated while disassembling. Do not disassemble the bar code reader.**
- **Be careful to ensure that the reading window does not become cracked or scratched. Any cracks or scratches may result in lowered levels of performance or malfunction.**


Located on the underside
Orbit ® by Metrologic Instruments, Inc.
Manufactured in Blackwood,New Jersey, USA
Barcode Scanner
November 2001(F)
Model: MS7120 RS232/LTPN
5V⎓
Serial #: XXXXXXXXX
Warrenty void if case is opened.
Contains no user serviceable components.
Complies with 21 CFR Chapter 1,Subchapter J.
Class IIa Laser Product-
Avoid Long-Term Viewing of Direct Laser Light.
Nach EN60825-1:1994/A11:1996
See user's guide for patent coverage.
CAUTION:
Laser light when open.
DO NOT STARE INTO BEAM
LISTED
94J8
I.T.E.
This Class B digital apparatus complies with Canadian ICES-003. Complies with FCC Class B. See Manual.
Cet appareil nuérique de la class B est conforme à la norme NMB-003 du Canada.
LASER KLASSE 1
PRODUKT

Safety Acquisition Standard

Item	Specification
Laser Safety Standard	Conforms to CDRH Class Ⅱa Conforms to IEC Class Ⅰ
Electricity Safety Regulations	Conforms to UL, CSA, VDE, EC
EMC Safety Regulations	Conforms to FCC Class A, CISPR Class B, EC

NOTE : If the contents of this page are not legible, order a new manual.

Notices

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Notice
This Class B digital apparatus complies with Canadian ICES-003.

Remarque
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Caution
⚠Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous laser light exposure. Under no circumstances should the customer attempt to service the laser scanner. Never attempt to look at the laser beam, even if the scanner appears to be nonfunctional. Never open the scanner in an attempt to look into the device. Doing so could result in hazardous laser light exposure. The use of optical instruments with the laser equipment will increase eye hazard.

Atención
⚠La modificación de los procedimientos, o la utilización de controles o ajustes distintos de los especificados aquí, pueden provocar una luz de láser peligrosa. Bajo ninguna circunstancia el usuario deberá realizar el mantenimiento del láser del escáner. Ni intentar mirar al haz del láser incluso cuando este no esté operativo. Tampoco deberá abrir el escáner para examinar el aparato. El hacerlo puede conllevar una exposición peligrosa a la luz de láser.
El uso de instrumentos ópticos con el equipo láser puede incrementar el riesgo para la vista.

NOTE : If the contents of this page are not legible, order a new manual.

⚠ Attention
L'emploi de commandes, réglages ou procédés autres que ceux décrits ici peut entraîner de graves irradiations. Le client ne doit en aucun cas essayer d'entretenir lui-même le scanner ou le laser. Ne regardez jamais directement le rayon laser, même si vous croyez que le scanner est inactif. N'ouvrez jamais le scanner pour regarder dans l'appareil. Ce faisant, vous vous exposez à une rayonnement laser qú êst hazardous. L'emploi d'appareils optiques avec cet équipement laser augmente le risque d'endommagement de la vision.

⚠ Achtung
Die Verwendung anderer als der hier beschriebenen Steuerungen, Einstellungen oder Verfahren kann eine gefährliche Laserstrahlung hervorrufen. Der Kunde sollte unter keinen Umständen versuchen, den Laser-Scanner selbst zu warten. Sehen Sie niemals in den Laserstrahl, selbst wenn Sie glauben, daß der Scanner nicht aktiv ist. Öffnen Sie niemals den Scanner, um in das Gerät hineinzusehen. Wenn Sie dies tun, können Sie sich einer gefährlichen Laserstrahlung aussetzen. Der Einsatz optischer Geräte mit dieser Laserausrüstung erhöht das Risiko einer Sehschädigung.

⚠ Attenzione
L'utilizzo di sistemi di controllo, di regolazioni o di procedimenti diversi da quelli descritti nel presente Manuale può provocare delle esposizioni a raggi laser rischiose. Il cliente non deve assolutamente tentare di riparare egli stesso lo scanner laser. Non guardate mai il raggio laser, anche se credete che lo scanner non sia attivo. Non aprite mai lo scanner per guardare dentro l'apparecchio. Facendolo potete esporVi ad una esposizione laser rischiosa. L'uso di apparecchi ottici, equipaggiati con raggi laser, aumenta il rischio di danni alla vista.

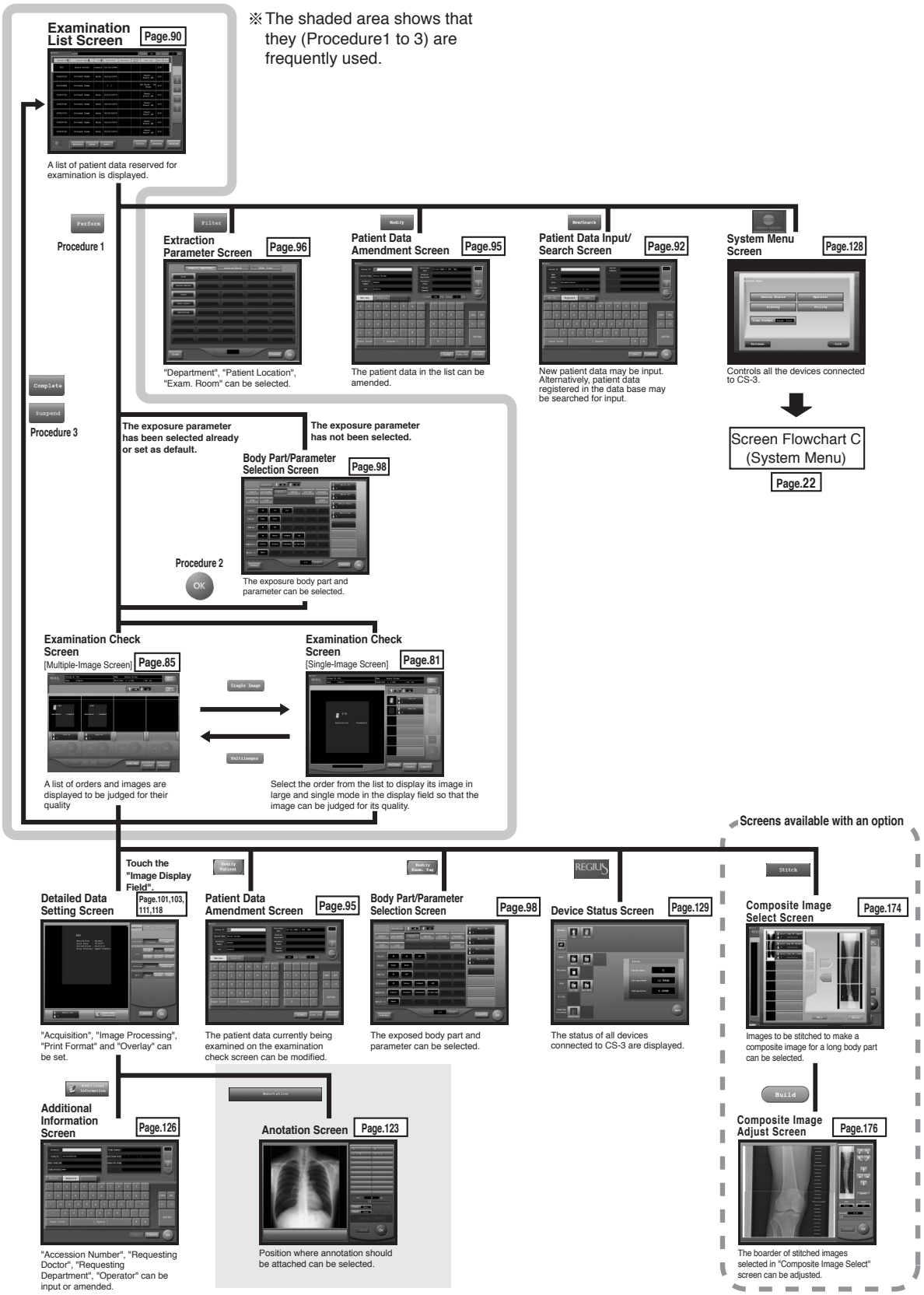
NOTE : If the contents of this page are not legible, order a new manual.

2

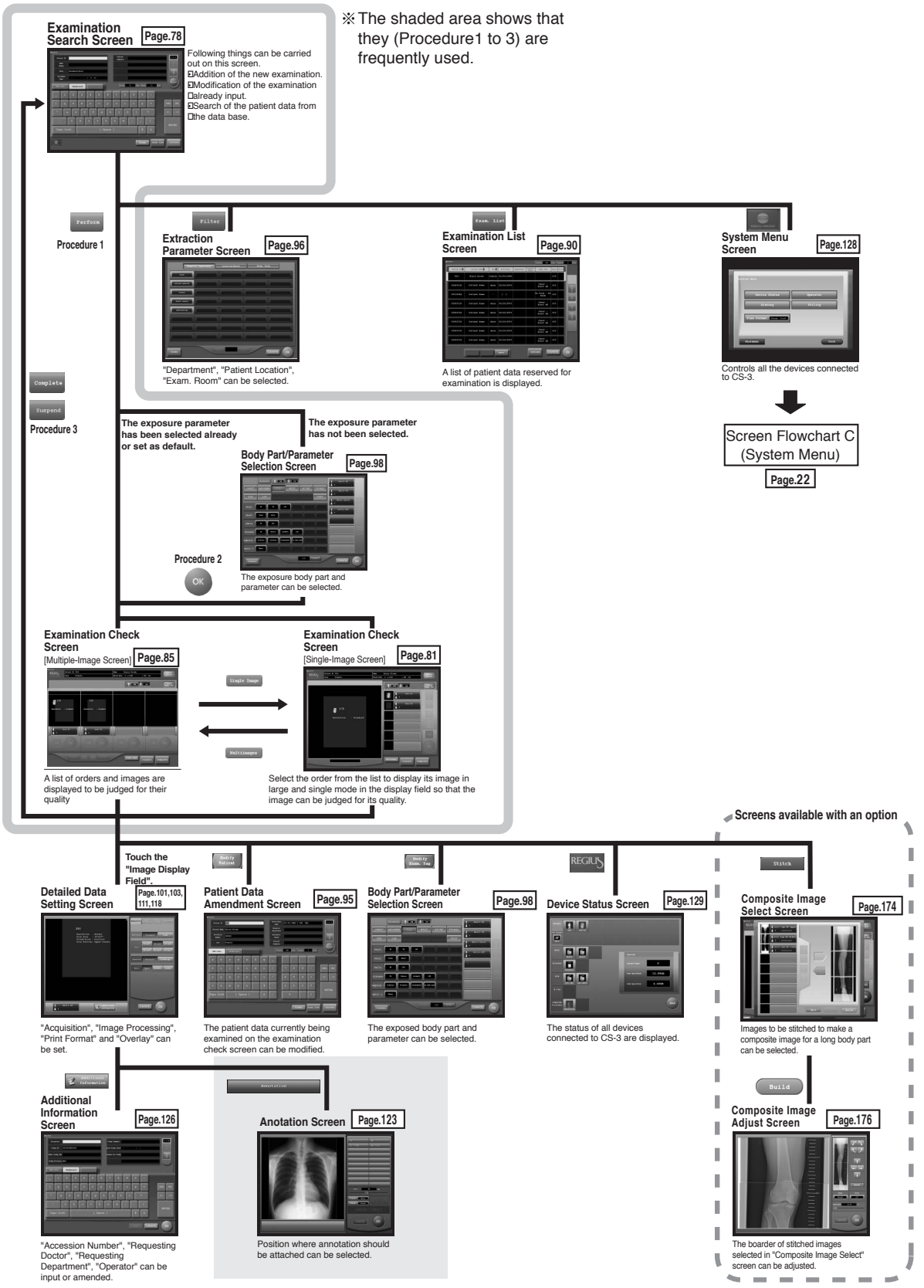
Operation

The operation of CS-3 is described in this chapter.

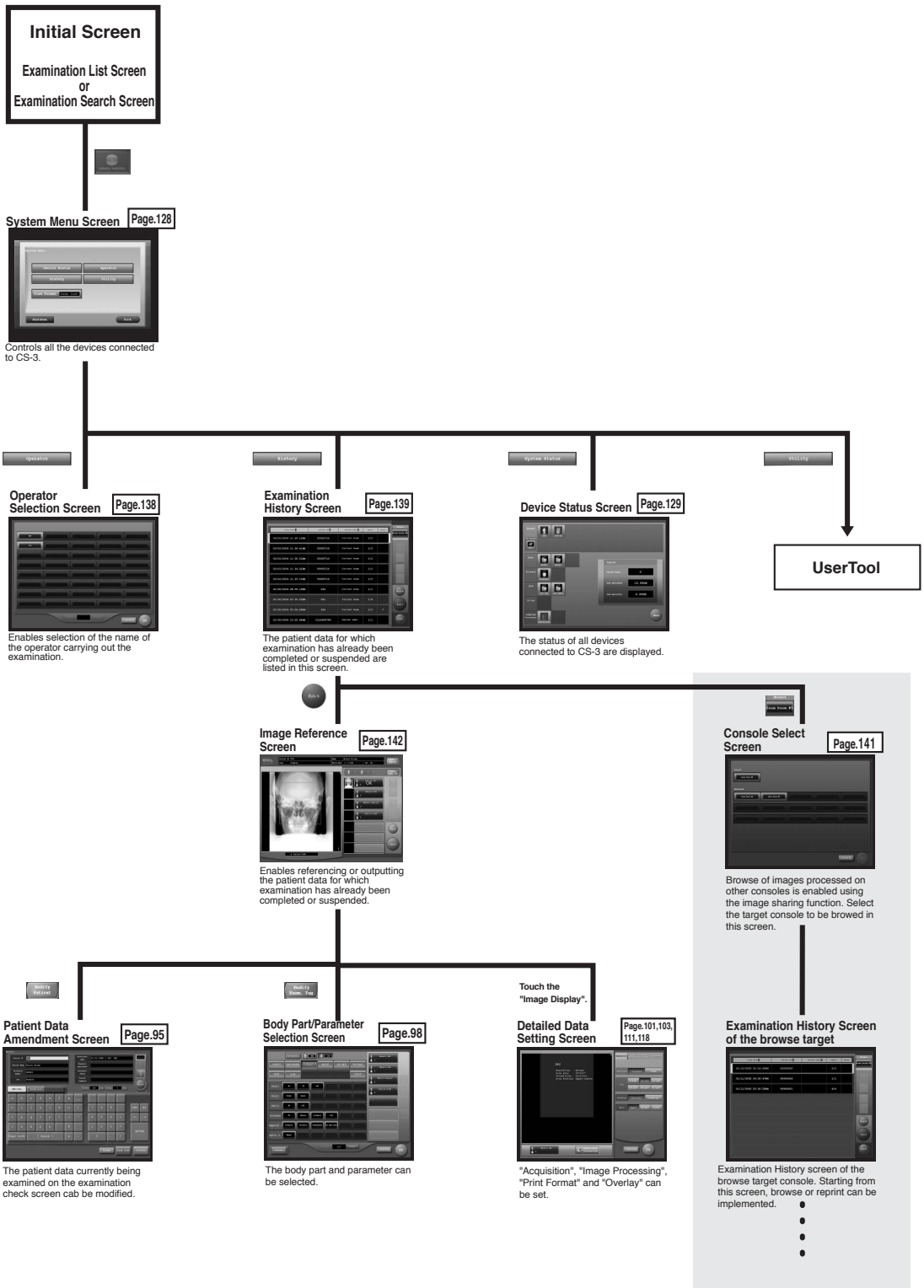
Screen Flowchart A (When the examination list screen has been set as the initial screen)


※The shaded area shows that they (Procedure1 to 3) are frequently used.
Examination List Screen
Page.90
A list of patient data reserved for examination is displayed.
Perform
Procedure 1
Filter
Extraction Parameter Screen
Page.96
"Department", "Patient Location", "Exam. Room" can be selected.
Modify
Patient Data Amendment Screen
Page.95
The patient data in the list can be amended.
New/Search
Patient Data Input/ Search Screen
Page.92
New patient data may be input. Alternatively, patient data registered in the data base may be searched for input.
System Menu Screen
Page.128
Controls all the devices connected to CS-3.
Screen Flowchart C (System Menu)
Page.22
Complete
Suspend
Procedure 3
The exposure parameter has been selected already or set as default.
The exposure parameter has not been selected.
Body Part/Parameter Selection Screen
Page.98
Procedure 2
OK
The exposure body part and parameter can be selected.
Examination Check Screen
[Multiple-Image Screen]
Page.85
Single Image
Multi Images
Examination Check Screen
[Single-Image Screen]
Page.81
A list of orders and images are displayed to be judged for their quality
Select the order from the list to display its image in large and single mode in the display field so that the image can be judged for its quality.
Screens available with an option
Touch the "Image Display Field".
Modify Patient
Detailed Data Setting Screen
Page.101,103, 111,118
"Acquisition", "Image Processing", "Print Format" and "Overlay" can be set.
Patient Data Amendment Screen
Page.95
The patient data currently being examined on the examination check screen can be modified.
Modify Exam. Tag
Body Part/Parameter Selection Screen
Page.98
The exposed body part and parameter can be selected.
REGIUS
Device Status Screen
Page.129
The status of all devices connected to CS-3 are displayed.
Stitch
Composite Image Select Screen
Page.174
Images to be stitched to make a composite image for a long body part can be selected.
Build
Composite Image Adjust Screen
Page.176
The boarder of stitched images selected in "Composite Image Select" screen can be adjusted.
Additional Information
Additional Information Screen
Page.126
"Accession Number", "Requesting Doctor", "Requesting Department", "Operator" can be input or amended.
Annotation
Anotation Screen
Page.123
Position where annotation should be attached can be selected.

Screen Flowchart B (When the examination search screen has been set as the initial screen)


※The shaded area shows that they (Procedure1 to 3) are frequently used.
Examination Search Screen Page.78
Following things can be carried out on this screen.
Addition of the new examination.
Modification of the examination already input.
Search of the patient data from the data base.
Perform
Procedure 1
Filter
Extraction Parameter Screen Page.96
"Department", "Patient Location", "Exam. Room" can be selected.
Exam. List
Examination List Screen Page.90
A list of patient data reserved for examination is displayed.
System Menu Screen Page.128
Controls all the devices connected to CS-3.
Screen Flowchart C (System Menu) Page.22
Complete
Suspend
Procedure 3
The exposure parameter has been selected already or set as default.
The exposure parameter has not been selected.
Body Part/Parameter Selection Screen Page.98
Procedure 2
OK
The exposure body part and parameter can be selected.
Examination Check Screen [Multiple-Image Screen] Page.85
A list of orders and images are displayed to be judged for their quality
Single Image
Multiimages
Examination Check Screen [Single-Image Screen] Page.81
Select the order from the list to display its image in large and single mode in the display field so that the image can be judged for its quality.
Screens available with an option
Touch the "Image Display Field".
Modify Patient
Detailed Data Setting Screen Page.101,103, 111,118
"Acquisition", "Image Processing", "Print Format" and "Overlay" can be set.
Patient Data Amendment Screen Page.95
The patient data currently being examined on the examination check screen can be modified.
Modify Exam. Tag
Body Part/Parameter Selection Screen Page.98
The exposed body part and parameter can be selected.
REGIUS
Device Status Screen Page.129
The status of all devices connected to CS-3 are displayed.
Stitch
Composite Image Select Screen Page.174
Images to be stitched to make a composite image for a long body part can be selected.
Additional Information
Additional Information Screen Page.126
"Accession Number", "Requesting Doctor", "Requesting Department", "Operator" can be input or amended.
Annotation
Anotation Screen Page.123
Position where annotation should be attached can be selected.
Build
Composite Image Adjust Screen Page.176
The boarder of stitched images selected in "Composite Image Select" screen can be adjusted.

Screen Flowchart C (System Menu)

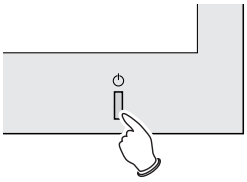

Initial Screen
Examination List Screen
or
Examination Search Screen
System Menu Screen
Page.128
Controls all the devices connected to CS-3.
Operator
History
System Status
Utility
Operator Selection Screen
Page.138
Enables selection of the name of the operator carrying out the examination.
Examination History Screen
Page.139
The patient data for which examination has already been completed or suspended are listed in this screen.
Device Status Screen
Page.129
The status of all devices connected to CS-3 are displayed.
UserTool
Back
Image Reference Screen
Page.142
Enables referencing or outputting the patient data for which examination has already been completed or suspended.
Console Select Screen
Page.141
Browse of images processed on other consoles is enabled using the image sharing function. Select the target console to be browed in this screen.
Modify Patient
Modify Exam. Img
Touch the "Image Display".
Patient Data Amendment Screen
Page.95
The patient data currently being examined on the examination check screen cab be modified.
Body Part/Parameter Selection Screen
Page.98
The body part and parameter can be selected.
Detailed Data Setting Screen
Page.101,103, 111,118
"Acquisition", "Image Processing", "Print Format" and "Overlay" can be set.
Examination History Screen of the browse target
Examination History screen of the browse target console. Starting from this screen, browse or reprint can be implemented.

Start Up

The procedure for start up of CS-3 is described below.

Before turning on the CS-3, check that all devices (Cassette Readers, Upright Readers, Printers, Viewers, Servers, etc.) are properly connected to the CS-3 and switched on.

Check that a floppy disk is not inserted in slot of the CS-3 Control Unit. If it is inserted, push the eject button to remove it. CS-3 will not start up with the floppy disk inserted.



1 Switch on the CS-3 Operation Unit stand-by button.

2 Press the Power button located on the front of the CS-3 Control Unit.

- **A CS-3 start up message and an OS (Operating System) start up message will be displayed in order on the CS-3 Operation Unit.**

System Start Up Screen

- **After a short time, the CS-3 system start up screen will be displayed. During display of this screen, internal system initialization will be executed.**

The CS-3 software version will be displayed under the heading "Version" during display of the system start up screen.
Initialization will be completed approximately three minutes after switching on power.

Exam Search Screen

Exam List Screen

- **After completion of initialization, the CS-3 initial screen (examination search screen or examination list screen) will be displayed; this indicates that the CS-3 can be operated.**

There are two types of display shown on the CS-3 initial screen; these are the examination search screen and the examination list screen. Which of the two will be displayed should be selected through the system menu depending on factors such as the system configuration of the CS-3.

Shut-Down (Power OFF)

The procedure for switching off the CS-3 power supply is described below.
Switching off the CS-3 power supply may be done from the examination search screen or the examination list screen on the CS-3 Operation Unit (monitor).

> The procedure detailed below must be followed when switching off the CS-3 power supply.
> Do not switch off power from the control unit power switch: doing so may result in loss of data or damage to the system software.

1 Touch the [KONICAMINOLTA] button at the bottom left of the initial screen (examination search screen or examination list screen).

- **The system menu will be displayed.**

p.28 Before Examination

2 Touch the [Shutdown] button on the system menu.

- **A confirmation request will be displayed.**

> The figure at left shows display when the examination search screen has been set as the initial screen.

3 Touch the [YES] button.

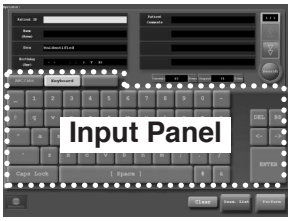
- **CS-3 termination processing will be carried out and, after a short time, power will be automatically switched off.**
- **To discontinue system termination, touch the [NO] button and then the [Back] button on the system menu. Termination will be aborted and the initial screen (examination search screen or examination list screen) displayed.**
- **Upon termination of CS-3, the reader unit will automatically be put into power-save (sleep) mode.**

> If image data is still being transmitted to external devices such as the printer, a message will be displayed. System shut-down will be executed upon completion of image transmission.
> Any images not output upon completion of system shut-down will be transmitted the next time CS-3 is activated.

Using the Input Panel

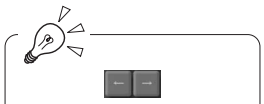
An input panel from which character data may be input is displayed on the examination search screen and the additional information screen (screens requiring data input).
The following two types of input panel are available.

- **Display changes automatically according to the input column currently selected on screen.**
- **Changes may be effected by touching the "ABC/abc" and "Keyboard" buttons at the top of the keyboard.**



[ABC/abc]
Displayed when an input column requiring input of alphabetical or numerical characters is selected.
Touching the "Caps Lock" key will switch between upper and lower case characters.

[Keyboard]
Displayed when an input column requiring input of alphabetical or numerical characters is selected.
Touching the "Caps Lock" key will switch between upper and lower case characters.



The arrow marks above the "ENTER" key are used to move the cursor position in the time/date input column.

3

Sequence of Examination

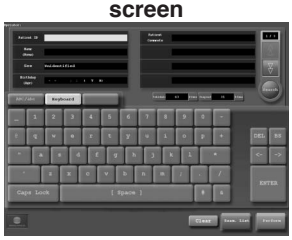
This chapter describes the sequence of examination using CS-3.

Before Examination

Two Initial Screens

CS-3 is furnished with two initial screens displayed after system initialization; the "Examination Search Screen" and the "Examination List Screen".

Examination Search screen



The examination search screen allows direct input of patient data and search of patient data from the data base for input.
The unit features ease of input and confirmation of patient data to be examined.

Examination List screen

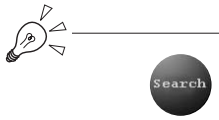
The examination list screen displays data for patients scheduled for examination and facilitates selection of data for patients examined.
This display makes for ease of checking examination data transmitted at once from ID-680 Series or Radiology Information System from the list.

From the examination search screen, you can display the examination list screen and check the scheduled examination. From the examination list screen, you can display the examination search screen and input the patient data. Note, however, that initialization of examination using CS-3 is possible from only one initial screen.

The [KONICAMINOLTA] button is displayed at the bottom left of the initial screen (examination search screen or examination list screen).

- **Touching the [KONICAMINOLTA] button displays the system menu.**
- **The initial screen may be changed using the [View Format] button in the system menu.**

p.78 Examination Search Screen
(When the examination search screen has been set as the initial screen)

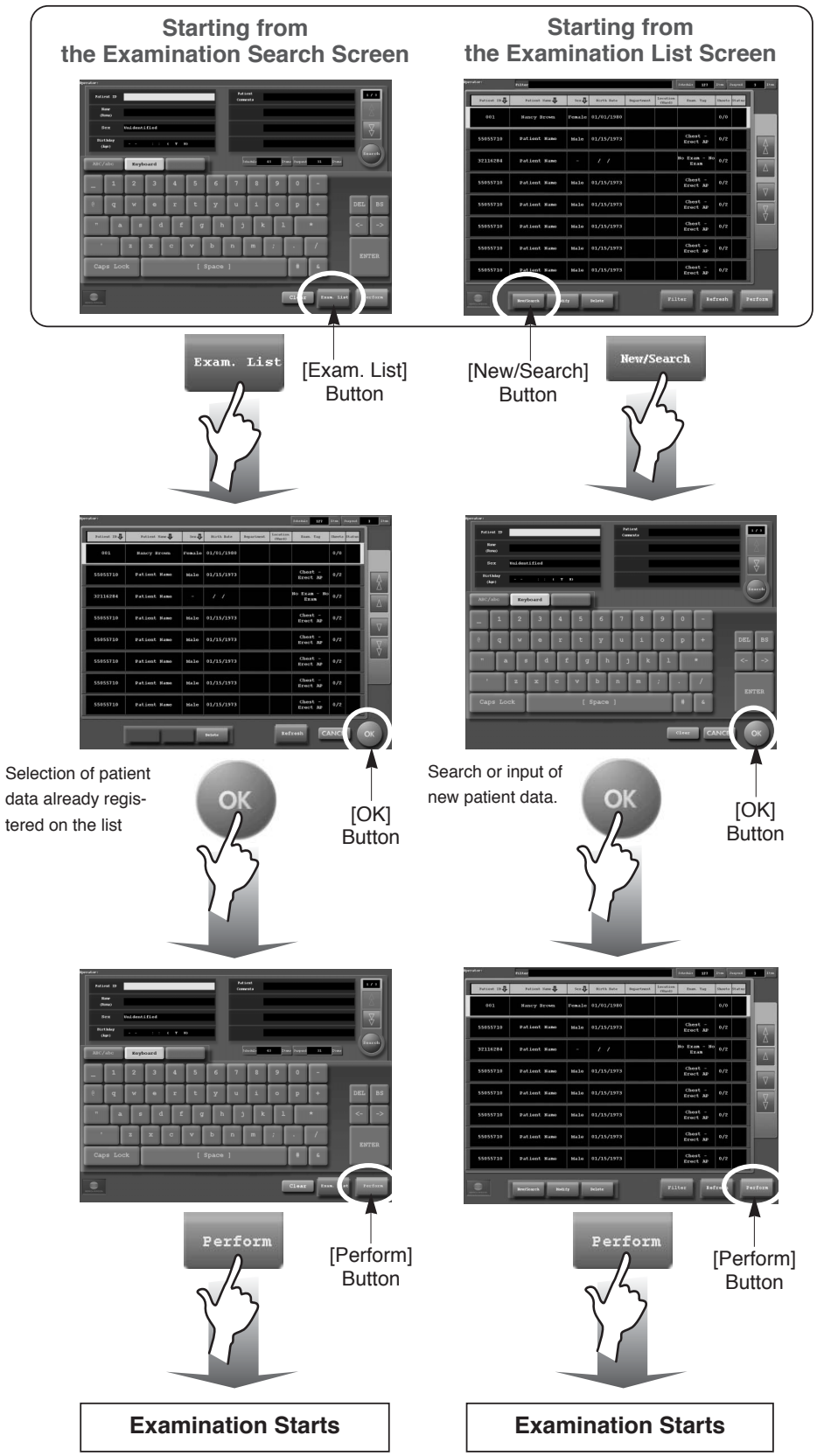


The "search" button is displayed in the following cases:
In systems where patient information is retrieved from the device in upper stream.
When using the CS-3 patient data base.

When using the CS-3 patient data base, backup should be carried out regularly using the User Tool.

p.79 Examination List Screen
(When the examination search screen has been set as the initial screen)

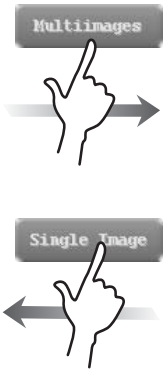
p.128 System Menu Screen


Starting from
the Examination Search Screen
Starting from
the Examination List Screen
Exam. List
[Exam. List]
Button
[New/Search]
Button
New/Search
Selection of patient
data already regis-
tered on the list
OK
[OK]
Button
Search or input of
new patient data.
OK
[OK]
Button
Perform
[Perform]
Button
Perform
[Perform]
Button
Examination Starts
Examination Starts

Two Examination Check Screens

There are two screen formats for reading and checking of X-RAY images: the single-image format which allows display of only one image and the multiple-image format which allows display of multiple screens in alignment.

Single-Image Format



Multiple-Image Format

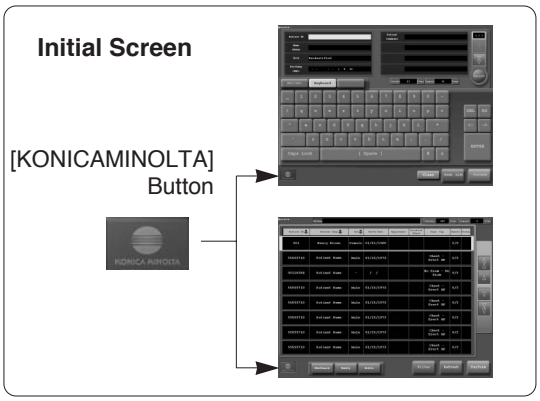
The single-image format
Display of only one screen selected from the exposure orders.
This format provides large display of the image and is therefore most suitable for examination of images of wide range, such as the thorax.

The multiple-image format
Display of four ordered images in alignment.
This format provides ease of comparison of multiple images of the same patient exposed from differing angles.

Touching the [Multi images] or [Single Image] button enables change of format as required.
Thus, comparison of images may be carried out using the multiple-image format and detailed examination of images carried out using the single-image format.

Selection of Operator

Once CS-3 is activated, the name of the examining operator must be selected.



1 Touch the [KONICAMINOLTA] button at the bottom left of the initial screen. (examination search screen or examination list screen)

- **The system menu will be displayed.**

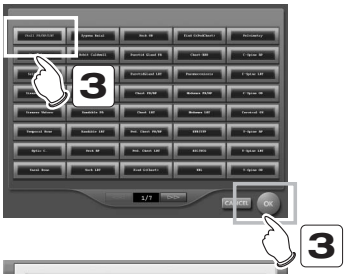
When the system configuration is set so that operator data is sent from a higher device, operator selection from CS-3 is not possible.

2 Touch the [Operator] button.

- **The operator selection screen will be displayed.**

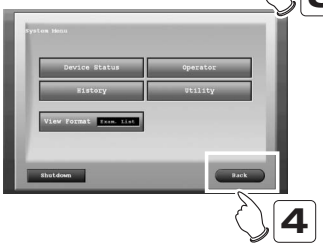
user tool

New registration of operator name and amendments of operator name may be effected using the user tool.



3 Touch the button corresponding to your own name on the list of operators' names followed by the [OK] button.

- **The display will return to the system menu.**



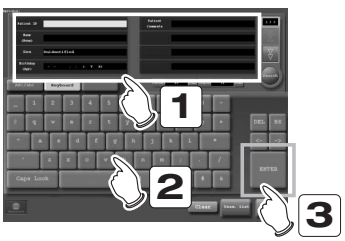
4 Touch the [Back] button.

- **The display will return to the examination search screen.**
- **The selected operator name will be displayed at the top left of the examination search and examination list screens.**

Patient Data Input (Input from CS-3)

On systems where examination data is input from CS-3 only, the examination search screen is usually set as the initial screen.

Prior to examination, patient data for the patient to be examined is input using the input panel (or the CS-3 keyboard) on the CS-3 Operation Unit.



1 Touch the patient ID input column.

- **The input column will turn white and a character input cursor will appear.**

2 Touch the input panel and input the patient ID.

3 Touch the [ENTER] button.

- **The next input window will turn white and a character input cursor will appear.**

After input of one item and execution of the [ENTER] button, the cursor will automatically move to the next column.
Where input is unnecessary, touch the [ENTER] button or the column to be input directly.

For input of "sex", "pregnancy" and "ward", input buttons are displayed instead of the input window. Touch these buttons to select each item. If input of "ward" is not required, touch the empty window.

Ex. : Screen for selection of sex

Following this screen:

- **Initializing examination**

p.33 Initialization of Examination

- **Display of list of input patient data**

p.36 Reserving Patient Data

Patient Data Input (Search from Data Base)

With basic system or the search-type system, it is possible to search patient data from the examination search screen using the patient ID, etc., as a key and to input this data into the examination search screen.

Items of patient data that can be retrieved: **patient ID, name**.

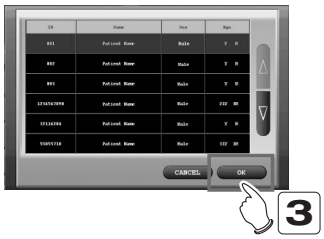
1 Touch the input window for input of patient ID, name (English) and input the characters to be searched from the input panel (or CS-3 keyboard).

2 Touch the [Search] button.

- **Patient data including the input characters will be searched and the result screen (patient ID, name, sex, age) displayed.**

Search by Patient ID : Searches only those Patient IDs that perfectly match the ID.
Search by Patient Name : Searches all patient names that partially match the condition.

The [Search] button is displayed only when the system configuration is set so that the patient data is searched from the data base in the higher device or CS-3.



3 Make selection by touching the patient data to be input and touch the [OK] button.

- **The selected patient data will be input into the examination search screen.**

Following this screen:

- **Initializing examination**

p.33 Initialization of Examination

- **Display of list of input patient data**

p.36 Reserving Patient Data

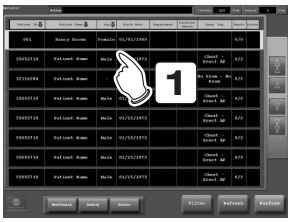
Input of patient data on the examination search screen will be registered in the data base upon initialization of examination.

In systems where patient information is retrieved from higher devices or where the patient data base is in CS-3, the search is automatically executed when the cursor moves to the next search item after input of the previous item.

Where only one lot of patient data is searched, the list reflecting the result of search will not be displayed. Data will be directly input into the examination search screen.

Checking Patient Data

In systems where examination data is sent from ID-680 Series or Radiology Information System (RIS), the examination list screen is usually set as the initial screen.
Patient data sent from ID-680 Series or Radiology Information System (RIS) is displayed on the examination list screen in the order in which it is registered.



1 Make selection by touching the patient data to be examined.

- **The selected data will be displayed in blue characters in a green frame.**

In systems where patient information is retrieved from higher devices, touch the "list update" button to update the list if the patient information to be retrieved is not displayed.

Following this screen:

- **Initialization of Examination**

p.33 Initialization of Examination

- **Deletion of patient data**
  ➔Select the patient data to be deleted from the list and touch the [Delete] button.

- **Modification of patient data**
  ➔Select the patient data to be modified from the list and touch the [Modify] button.

p.95 Patient Data Amendment Screen

- **Input of new patient data**
  ➔Touch the [New/Search] button

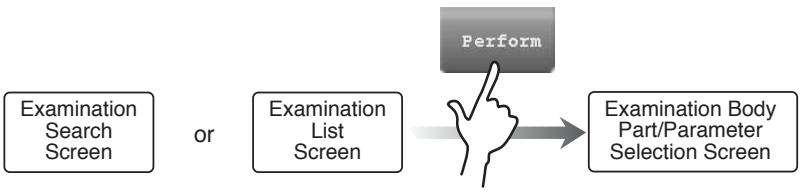
- **Search and input of patient data**
  ➔Touch the [New/Search] button

p.92 Patient Data Input/Search Screen (When the examination list screen has been set as the initial screen)

Initialization of Examination

Touch the [Perform] button on the examination search or examination list screen.

When order is not registered



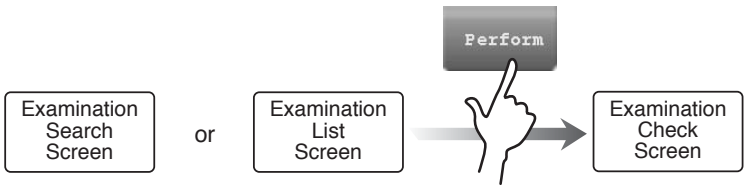
When patient data is input using the examination search screen or when examination data sent from ID-680 Series or Radiology Information System (RIS) does not include order, the examination body part/parameter selection screen is displayed.

Following this screen:

- **Examination Body Part/ Parameter Selection**

p.34 Examination Body Part/ Parameter Selection

When order is registered



When the examination order is already registered or the order is contained in the examination information sent from ID-680 Series or Radiology Information System (RIS), the examination check screen is displayed.

The [Perform] button appears on the initial screen (examination search or examination list screen).

Following this screen:

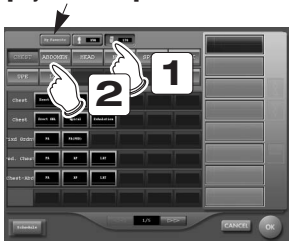
- **Exposure** **p.36-44 Exposure**

Examination Body Part/ Parameter Selection

The body part to be examined is selected using the list of buttons displayed and the order is registered.
Up to 32 examination orders may be registered for one patient data.

p.98 Body Part/Parameter Selection Screen

[My Favorite] Button



1 Touch the reader classification button to select the reader.

- **The display of buttons will automatically change according to the reader selection.**

2 Touch and select the body part from the general classification buttons.

3 Touch the parameter button and select detailed parameters.

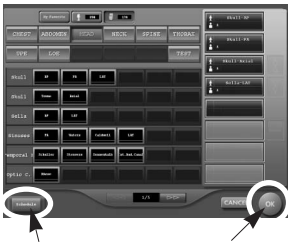
- **Selection using the parameter button is registered as an order and displayed on the list.**
- **A parameter button with a yellow line indicates a button where multiple parameters are set. Touching such buttons will result in simultaneous registration of all orders.**
- **The cursor in the order column (green frame) moves to the next order.**

4 To register multiple parameters in orders, touch the following parameter buttons.

- **To delete parameters mistakenly registered, move the cursor to the relevant order by touching that order before the "delete" button.**
- **After display of the exposure parameter selection screen, parameters registered in orders by set parameters are sorted in the sequence in which they are registered.**

[My Favorite] Button
In [My Favorite] Button, register the "parameter key" and "set key" that are frequently used. Several parameter keys of different readers can be registered as a favorite "set key".

Set Key
Several exposure parameters are registered in the set keys.
The parameter that is used frequently can be registered.
A yellow under line is displayed at the bottom of the parameter button.



5 After the order registration is completed;

- ▶ Touch the [OK] button to start the examination.
  - **The examination check screen will be displayed.**
- ▶ Touch the [Schedule] button to register another examination.
  - **The screen will return to the initial screen.**

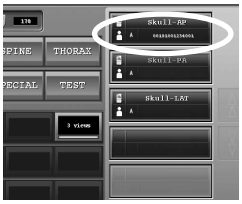
Following this screen:

- **Start examination**
- **Register another examination**

p.36-44 Exposure

p.31, 32 Patient Data Input

When the reader device is a cassette reader, and the registration method is "Bar Code Registration", the cassette bar code may be read into the order registered on the examination check screen (see right). Select the order in which the bar code should be registered to read the cassette bar code.



Touch the [OK] button to validate the registration of the bar code. Insertion of the cassette without touching the [OK] button will result in error ("REGISTRATION ERROR - PRESS EJECT").
If this message is displayed, push the eject button on the cassette reader to remove the cassette. Then, register the bar code again and touch the [OK] button to move to the examination check screen. When the examination check screen is displayed, insert the cassette again.

Reserving Patient Data

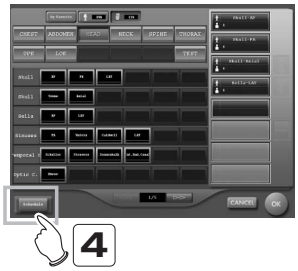
Once orders have been registered using the examination body part/parameter selection screen, examination may be initiated immediately; after registration of the examination body part/parameters additional patient data may be input or searched using CS-3, it is also possible to simply make a reservation on the examination list.

1 Input patient data on the examination search screen.

p.31, 32 **Patient Data Input (Input from CS-3) (Search from Data Base)**

2 Touch the [Perform] button.

- **The examination body part/parameter selection screen will be displayed.**



3 Select exposure parameters and register the order.

p.34 **Examination Body Part/ Parameter Selection**

4 Touch the [Schedule] button.

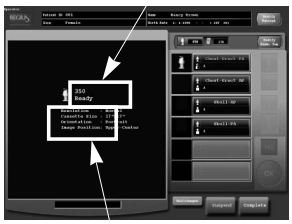
- **The exposure parameters will be registered in patient data input in step 1 and the display returned to the initial screen.**
- **The number displayed in the [items] column will be increment by "1" each time a reservation is added.**

After reserving patient data on the examination list and returning to the examination search screen, the next patient data may be input. To check patient data reserved on the examination list, touch the [Exam. List] button on the examination search screen.

Exposure [Single-Image Format/Upright Position Reader]

The procedure for doing exam using an upright position reader with the examination search screen in Single-Image format is described below.

Reader Status



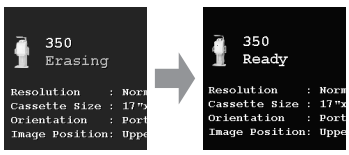
Exposure Parameter

1 Touch the order to be read on the examination check screen.

- **The selected order will be shown in a green frame.**
- **Parameters corresponding to exposure parameters and reader status will be displayed in the image display field.**

p.81 **Examination Check Screen [Single-Image Screen]**

If the reader device is upright position reader, the patient name and patient ID will be displayed in the reader display panel. Check with the patient to ensure that the correct name is displayed.



2 Ensure that "Ready" is displayed in the reader status window.

- **If "Erasing" is displayed, wait until erasure has been completed and the display changes to "Ready".**

3 Position the reader device to match the patient.

- **If it is necessary to alter size, angle or position, use the panel switches on the reader device or touch the image display field on the CS-3 Operation Unit to select them on the detailed data selection screen.**
- **For details of operation of the reader device, refer to the reader device operation manual.**

4 Depress the exposure button on the X-ray generator.

- **The image read by the reader will be displayed in the image display field.**
- **The S-value of the image read will be displayed below the image display field.**
- **The green frame will move to the next order on the order list.**

5 Repeat steps **1**~**4** to execute exposure for each of the orders on the order list.

Whenever the examination is started and the device is switched to another device, an erasure will be carried out. In order to carry out the examination smoothly, it is recommended that order selection be made prior to positioning the patient for exposure when using the upright position reader.

Automatic Confirmation Function

In cases where there is an automatic confirmation function, after a certain time has elapsed from reading the image with a green frame around the order, the confirmation process will be judged to be completed and the image will be output.

This function is not available in the examination check screen (multiple-image format).

- **The [OK] button displays time remaining (secs.) until the order is confirmed automatically.**

Following this screen:

Outputting the image

Select the target order from the order list. →

Touch

p.45, 46 Image Output [Single-Image Format]

Amending patient data

→

Touch

p.95 Patient Data Amendment Screen

Amending exposure parameters/ Adding or deleting the order

→

Touch

p.98 Body Part/ Parameter Selection Screen

Amending image processing

Select the target order from the order list. → **Image Display Field** Touch → **Image Processing** Touch

p.103 Detailed Data Setting Screen (Image Processing)

Amending print format

Select the target order from the order list. → **Image Display Field** Touch → **Print Format** Touch

p.111 Detailed Data Setting Screen (Print Format)

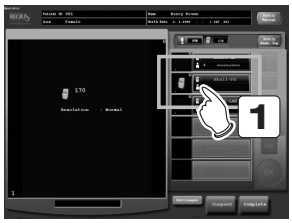
Amending overlay

Select the target order from the order list. → **Image Display Field** Touch → **Overlay** Touch

p.118 Detailed Data Setting Screen (Overlay)

Exposure [Single-Image Format/Cassette Reader + Bar Code Registration]

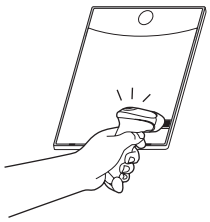
The procedure for doing an examination using a cassette reader with the examination check screen in single-image format using a bar code reader is described below.



1 Touch the order to be read on the order list.

- **The selected order will be displayed in a green frame.**

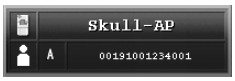
p.81
Examination Check Screen
[Single-Image Screen]



2 Read the bar code on the cassette using the bar code reader.

- **Successful reading of the bar code will be indicated by a short tone (beep) and illumination (green) of the LED indicator.**
- **The cassette bar code will be displayed in the selected order.**

Bar code reading → exposure → cassette reading may be carried out individually for each order.

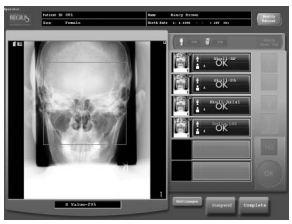


3 Repeat steps **1** and **2** to read the bar code for each order.

4 Insert the cassettes which have completed the exposure process into the insertion slot of the cassette reader.

- **Cassettes may be inserted in any order.**
- **The image read will be displayed at the left of the order.**

The description for the use of bar code reader in the left is an example for a single bar code reader. However, it can be also applied to a multi-bar code reader.



5 To check images read, touch the order corresponding to the image to be checked.

- **The image of the selected order will be displayed in the image display field.**
- **The S-value of the image read will be displayed below the image display field.**

Automatic Confirmation Function

In cases where there is an automatic confirmation function, after a certain time has elapsed from reading the image with a green frame around the order, the confirmation process will be judged to be completed and the image will be output.

This function is not available in the examination check screen (multiple-image format).

- **The [OK] button displays time remaining (secs.) until the order is confirmed automatically.**

Following this screen:

Outputting the image

Select the target order from the order list. → OK
Touch

p.45, 46 **Image Output** (Single-Image Format)

Amending patient data

→ Modify Patient
Touch

p.95 **Patient Data Amendment Screen**

Amending exposure parameters/ Adding or deleting the order

→ Modify Exam. Tag
Touch

p.98 **Body Part/ Parameter Selection Screen**

Amending image processing

Select the target order from the order list. → **Image Display Field**
Touch → **Image Processing**
Touch

p.103 **Detailed Data Setting Screen** (Image Processing)

Amending print format

Select the target order from the order list. → **Image Display Field**
Touch → **Print Format**
Touch

p.111 **Detailed Data Setting Screen** (Print Format)

Amending overlay

Select the target order from the order list. → **Image Display Field**
Touch → **Overlay**
Touch

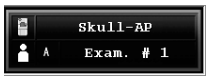
p.118 **Detailed Data Setting Screen** (Overlay)

Exposure [Single-Image Format/Cassette Reader + Screen Menu Selection]

The procedure for carrying out an examination using a cassette reader without a bar code reader with the examination check screen in single-image format is described below.

1 Touch the order to be read on the order list.

- **The reading sequence will be displayed according to the touch sequence.**
- **Touching again an order displayed in the reading sequence will result in cancellation of reading of that order and deletion from the reading sequence.**



2 After exposure, insert the cassette into the cassette insertion slot in the sequence set in step **1**.

- **The image read from the cassette will be displayed in the image display field corresponding to the order "#1".**
- **Each time the reading is completed, the reading order of each order will be descended.**

p.81 **Examination Check Screen** [Single-Image Screen]

3 To check images read, touch the order corresponding to the image to be checked.

- **The image of the selected order will be displayed in the image display field.**
- **The S-value of the image read will be displayed below the image display field.**

Automatic Confirmation Function

In cases where there is an automatic confirmation function, after a certain time has elapsed from reading the image with a green frame around the order, the confirmation process will be judged to be completed and the image will be output.

This function is not available in the examination check screen (multiple-image format).

- **The [OK] button displays time remaining (secs.) until the order is confirmed automatically.**

Following this screen:

Outputting the image

Select the target order from the order list. → OK → Touch

p.45, 46 Image Output (Single-Image Format)

Amending patient data

→ Modify Patient → Touch

p.95 Patient Data Amendment Screen

Amending exposure parameters/ Adding or deleting the order

→ Modify Exam. Tag → Touch

p.98 Body Part/ Parameter Selection Screen

Amending image processing

Select the target order from the order list. → Image Display Field → Touch → Image Processing → Touch

p.103 Detailed Data Setting Screen (Image Processing)

Amending print format

Select the target order from the order list. → Image Display Field → Touch → Print Format → Touch

p.111 Detailed Data Setting Screen (Print Format)

Amending overlay

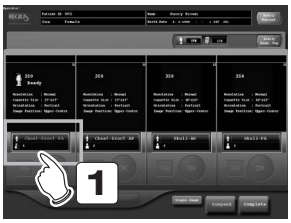
Select the target order from the order list. → Image Display Field → Touch → Overlay → Touch

p.118 Detailed Data Setting Screen (Overlay)

The detailed data settings ("Image Processing", "Print Format" and "Overlay") cannot be modified once the order is reserved in the step **1**.
Touch the image display field to change it after the reading is completed or the reading reservation is canceled.

Exposure [Multiple-Image Format/Upright Position Reader]

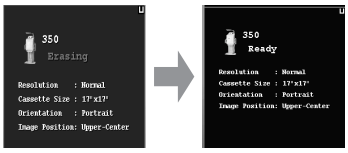
The procedure for carrying out an examination using an upright position reader with the examination check screen in multiple-image format is described below.



1 Touch the order to be read on the order list.

- **The selected order will be shown in a green frame.**
- **Parameters corresponding to exposure parameters and reader status will be displayed in the image display field.**

p.85 **Examination Check Screen [Multiple Image Screen]**



2 Ensure that "Ready" is displayed in the reader status window.

- **If "Erasing" is displayed, wait until erasure has been completed and the display changes to "Ready".**

3 Position the reader device to match the patient.

- **If it is necessary to alter size, angle or position, use the panel switches on the reader device or touch the image display field on the CS-3 Operation Unit, select them on the detailed data selection screen.**
- **For details of operation of the reader device, refer to "Upright Reader Operation Manual".**

If the reader device is REGIUS 350, the patient name and patient ID will be displayed in the reader display panel.
Check with the patient to ensure that the correct name is displayed.

4 Depress the exposure button on the X-ray generator.

- **The image read by the reader will be displayed in the image display field.**
- **The S-value of the image read will be displayed below the image display field.**
- **The green frame will move to the next order on the order list.**

5 Repeat steps **1**~**4** to execute exposure for each of the orders on the order list.

Whenever the examination is started and the device is switched to another device, an erasure is carried out.
In order to expose smoothly, it is recommended that order selection be made prior to positioning the patient for exposure.

The automatic confirmation function cannot be used in the multiple-image format.

Following this screen:

Outputting the image

Select the target order from the order list. → OK (Touch)

p.45, 46 Image Output (Single-Image Format)

Amending patient data

→ Modify Patient (Touch)

p.95 Patient Data Amendment Screen

Amending exposure parameters/ Adding or deleting the order

→ Modify Exam. Tag (Touch)

p.98 Body Part/ Parameter Selection Screen

Amending image processing

Select the target order from the order list. → Image Display Field (Touch) → Image Processing (Touch)

p.103 Detailed Data Setting Screen (Image Processing)

Amending print format

Select the target order from the order list. → Image Display Field (Touch) → Print Format (Touch)

p.111 Detailed Data Setting Screen (Print Format)

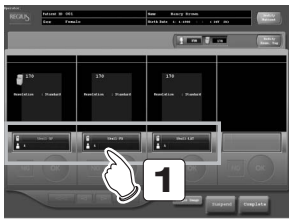
Amending overlay

Select the target order from the order list. → Image Display Field (Touch) → Overlay (Touch)

p.118 Detailed Data Setting Screen (Overlay)

Exposure [Multiple-Image Format/Cassette Reader + Bar Code Registration

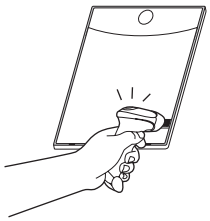
The procedure for carrying out an examination using a cassette reader with the examination check screen in multiple-image format using a bar code reader is described below.



1 Touch the order to be read on the order list.

- **The selected order will be displayed in a green frame.**

p.85 Examination Check Screen [Multiple Image Screen]



2 Read the bar code on the cassette using the bar code reader.

- **Successful reading of the bar code will be indicated by a short tone (beep) and illumination (green) of the LED indicator.**
- **The cassette bar code will be displayed in the selected order.**

Bar code reading → exposure → cassette reading may be carried out individually for each order.

3 Repeat steps **1**, **2** to read the bar code for each order.

4 Insert the cassettes which have completed the exposure process into the insertion slot of the cassette reader.

- **Cassettes may be inserted in any order.**
- **The image read will be displayed above the order with bar code registration.**
- **The S-value of the image read will be displayed above the image display field.**

The description for the use of bar code reader in the left is an example for a single bar code reader. However, it can be also applied to a multi-bar code reader.

The automatic confirmation function cannot be used in the multiple-image format.

Following this screen:

Outputting the image

Select the target order from the order list. → OK → Touch

p.45, 46
Image Output
(Single-Image Format)

Amending patient data

→ Modify Patient → Touch

p.95
Patient Data Amendment Screen

Amending exposure parameters/ Adding or deleting the order

→ Modify Exam. Tag → Touch

p.98
Body Part/ Parameter Selection Screen

Amending image processing

Select the target order from the order list. → Image Display Field → Touch → Image Processing → Touch

p.103
Detailed Data Setting Screen
(Image Processing)

Amending print format

Select the target order from the order list. → Image Display Field → Touch → Print Format → Touch

p.111
Detailed Data Setting Screen
(Print Format)

Amending overlay

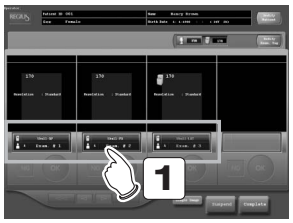
Select the target order from the order list. → Image Display Field → Touch → Overlay → Touch

p.118
Detailed Data Setting Screen
(Overlay)

Once the cassette is inserted into the reader, no operation may be carried out for the image.
When the message shown right is displayed, touch [YES] to close the message.

Exposure [Multiple-Image Format/Cassette Reader + Screen Menu Selection]

The procedure for carrying out an examination using a cassette reader without a bar code reader with the examination check screen in multiple-image format is described below.



1 Touch the order to be read on the order list.

- **The reading sequence will be displayed according to the touch sequence.**

- **Touching again an order displayed in the reading sequence will result in cancellation of reading of that order and deletion from the reading sequence.**

p.85
Examination Check Screen
[Multiple Image Screen]

2 After exposure, insert the cassette into the cassette reader insertion slot in the sequence set in step **1**.

- **The image read from the cassette will be displayed in the image display field corresponding to the order "#1".**
- **The S-value of the image read will be displayed below the image display field.**
- **Each time the reading is completed, the reading sequence of each order will be descended.**

The automatic confirmation function cannot be used in the multiple-image format.

Following this screen:

Outputting the image

Select the target order from the order list. → OK → Touch

p.45, 46
Image Output
(Single-Image Format)

Amending patient data

→ Modify Patient → Touch

p.95
Patient Data Amendment Screen

Amending exposure parameters/ Adding or deleting the order

→ Modify Exam. Tag → Touch

p.98
Body Part/ Parameter Selection Screen

Amending image processing

Select the target order from the order list. → Image Display Field → Touch → Image Processing → Touch

p.103
Detailed Data Setting Screen
(Image Processing)

Amending print format

Select the target order from the order list. → Image Display Field → Touch → Print Format → Touch

p.111
Detailed Data Setting Screen
(Print Format)

Amending overlay

Select the target order from the order list. → Image Display Field → Touch → Overlay → Touch

p.118
Detailed Data Setting Screen
(Overlay)

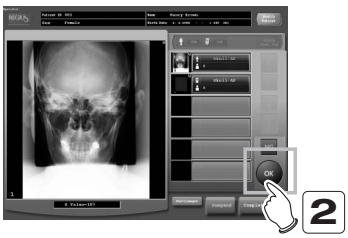
The detailed data settings ("Image Processing", "Print Format" and "Overlay") cannot be modified once the order is reserved in the step **1**.
Touch the image display field to change it after the reading is completed or the reading reservation is canceled.

Image Output [Single-Image Format/Output per Order]

The procedure for image output per order with the examination check screen in single-image format is described below.

p.81 **Examination Check Screen [Single-Image Screen]**

In cases where there is an automatic confirmation function, after a certain time has elapsed from reading the image, the confirmation process will be judged to be completed and the image will be output.



1 Touch the order to be output on the order list.

- **The selected order will be displayed in a green frame.**

2 Touch the [OK] button.

- **Image output will be initiated and small printer and host icons will be displayed at the top left of the image display field.**
- **Upon initialization of image output, the icons will change from white to green.**
- **After completion of output to each device, the icons will disappear.**

Images may be output one at a time upon completion of each image reading operation, or in batch mode upon completion of the reading operation for all orders.

p.46 **Image Output [Single-Image Format/Batch Mode Output of all Orders]**

Depending on the set up at the time of installation, either of the icons shown in the right may be printed on the edge of output film(image data when output to the Host), indicating the image is mirrored or not.

: not mirrored

: mirrored

3 Repeat steps **1** and **2** to output all the images.

4 Touch the [Complete] button.

- **The display changes to the examination search screen or examination list screen.**

: Printer Output Queue

: Host Output Queue

Green: Outputting
White: Awaiting output

When outputting the image again even after the examination is completed, or outputting the image more than once, the second or later image will be output through the "Image Reference Screen".

p.61 **Image Reference after Examination (Output Again)**

Image Output [Single-Image Format/Batch Mode Output of all Orders]

The procedure for batch mode image output with the examination check screen in single-image format is described below.

In cases where the automatic confirmation function is activated, after a specific time has elapsed from reading the image, the confirmation process will be judged to be completed and the image will be output.

1 Check the image processing and overlay for all the images exposed.

p.81 **Examination Check Screen [Single-Image Screen]**

2 Touch the [Complete] button.

- **A message will be displayed indicating that there are images that are not specified to OK or NG.**

3 Touch the [YES] button.

- **All images will be output and examination terminated.**
- **Display will return to either the examination search or examination list screen.**
- **Touching the [NO] button will result to the examination check screen.**

After batch mode output of all orders, examination will be terminated and display will return to the initial screen (examination search or examination list screen).

When outputting the image again even after the examination is completed, or outputting the image more than once, the second or later image will be output through the "Image Reference Screen".

p.61 **Image Reference after Examination (Output Again)**

Depending on the set up at the time of installation, either of the icons shown in the right may be printed on the edge of output film(image data when output to the Host), indicating the image is mirrored or not.

: not mirrored

: mirrored

Image Output [Multiple-Image Format/Output per Order]

The procedure for image output per order with the examination check screen in multiple-image format is described below.

1 Check the image processing and overlay for the order to be output.

2 Touch the [OK] button.

- **Image output will be initiated and small printer and host icons will be displayed at the top left of the image display field.**
- **Upon initialization of image output, the icons will change from white to green.**
- **After completion of output to each device, the icons will disappear.**

3 Repeat steps **1** and **2** to output all the images.

4 Touch the [Complete] button.

- **The display changes to the examination search screen or examination list screen.**

Images may be output one at a time upon completion of each image reading operation, or in batch mode upon completion of the reading operation for all orders.

p.48
Image Output [Multiple-Image Format/Batch Mode Output of all Orders]

: Printer Output Queue
: Host Output Queue

Green: Outputting
White: Awaiting output

When outputting the image again even after the examination is completed, or outputting the image more than once, the second or later image will be output through the "Image Reference Screen".

p.61
Image Reference after Examination (Output Again)

Depending on the set up at the time of installation, either of the icons shown in the right may be printed on the edge of output film(image data when output to the Host), indicating the image is mirrored or not.

: not mirrored
: mirrored

Image Output [Multiple-Image Format/Batch Mode Output of all Orders]

The procedure for batch mode image output with the examination check screen in multiple-image format is described below.

1 Check the image processing and overlay for all the images exposed.

p.85 **Examination Check Screen [Multiple-Image Screen]**

2 Touch the [Complete] button.

- **A message will be displayed indicating that there are images that are not specified to OK or NG.**

p.60 **Examination Termination**

3 Touch the [YES] button.

- **All images will be output and examination terminated.**
- **Display will return to the initial screen (examination search or examination list screen).**
- **Touching the [NO] button will result to the examination check screen.**

After batch mode output of all orders, examination will be terminated and display will return to the initial screen (examination search or examination list screen).

When outputting the image again even after the examination is completed, or outputting the image more than once, the second or later image will be output through the "Image Reference Screen".

p.61 **Image Reference after Examination (Output Again)**

Depending on the set up at the time of installation, either of the icons shown in the right may be printed on the edge of output film(image data when output to the Host), indicating the image is mirrored or not.

: not mirrored

: mirrored

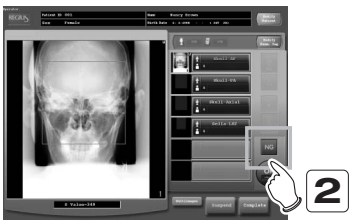
Image Erasing

The procedure for erasing images in cases where a problem exists with the image read that requires re-execution of exposure is described below.

In cases where an erroneous cassette has been read onto a selected order from the screen menu, the substitution function may be used to substitute the correct image for the wrong image.

Single-Image Screen

p.51 Image Substitution



1 Touch the order for which the image is to be erased.

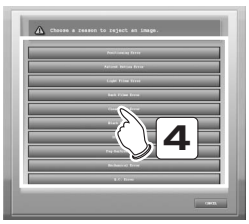
2 Touch the [NG] button.

- **A confirmation request will be displayed.**

3 Touch the [YES] button.

- **The image for the selected order will be erased.**
- **To abort erasure, touch the [NO] button.**
- **If the erroneous cassette is read for the selected order from the screen menu, a [substitute] button will appear on the screen show at left.**

When the automatic confirmation function is activated, touch the [NG] button before the time remaining displayed by the [OK] button decrements to [0].
Change the screen to another one such as a "Multiple-Image Screen" in order to return the counter to the initial value.



4 Select the reason for image rejection from the displayed list (buttons).

- **Selecting the reason for image rejection will abort the image, and displays a message confirming whether or not to make reexamination.**
- **Touching the [CANCEL] button will switch to the "Exam Check" screen without image abortion.**

Selected "Rejected Reason" will be controlled by the CS-3 administrator of each institute.

Text strings displayed on the buttons can be edited using the User Tool.

5 Touch the [YES] button to implement a reexamination.

- **Unprocessed order that is identical to the one whose image has been aborted will be added. The order whose image has been aborted will be displayed with "NG" on the order button.**
- **Touching the [NO] button will not add an unprocessed order, while the order whose image has been aborted will be displayed with "NG" on the order button.**

Changes on "Rejected Reason" and whether or not reexamination was done can be implemented on the "Image Reference" screen even after completing the examination.

Multiple-Image Screen

1 Touch the order for which the image is to be erased.

2 Touch the [NG] button under the order whose image to be erased.

- **A confirmation request will be displayed.**

When Auto-Confirm is enabled, touch the [NG] button before the remaining time displayed on the [OK] button reaches “0”.
Switching to other screen such as “Multi-Image” screen will reset the count of the Auto-Confirm.

3 Touch the [YES] button

- **“Reject Reason” screen will be displayed.**

p.36-44 Exposure

4 Select the reason for image rejection from the displayed list (buttons).

- **Selecting the reason for image rejection will abort the image, and displays a message confirming whether or not to make reexamination.**
- **Touching the [CANCEL] button will switch to the “Exam Check” screen without image abortion.**

Selected “Rejected Reason” will be controlled by the CS-3 administrator of each institute.

Text strings displayed on the buttons can be edited using the User Tool.

5 Touch the [YES] button to implement a reexamination.

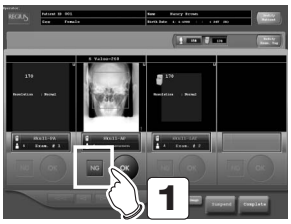
- **Unprocessed order that is identical to the one whose image has been aborted will be added. The order whose image has been aborted will be displayed with “NG” on the order button.**
- **Touching the [NO] button will not add an unprocessed order, while the order whose image has been aborted will be displayed with “NG” on the order button.**

Changes on “Rejected Reason” and whether or not reexamination was done can be implemented on the “Image Reference” screen even after completing the examination.

Image Substitution

When a post registered cassette is being used and an image is read from a cassette differing from that in the order, the following procedure may be followed to substitute the image into the correct order.

p.49 Image Erasing



Example
The image read into the "skull A->P" order has been mistakenly read into the "skull R->L" order.

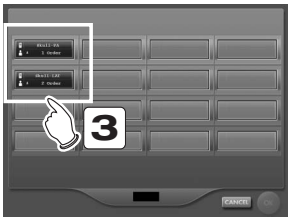
1 Following the image erasing procedure, select the order mistakenly read and touch the [NG] button.

- **A message requesting confirmation of erasure of data read will be displayed.**

The image substitution can be carried out only when the image is read by the cassette reader with a screen menu selection method.

2 Touch the [Recovery] button.

- **Orders for which the read process has not been executed will be displayed on an order selection list.**



Selection of the "skull A->P" order.

3 Select the correct order for the image read.

- **The selected order will be displayed in a green frame.**

Only cassette reader orders images of which have not been read are displayed as orders available for substitution on the order selection screen.

Transfer of the image to the "skull A->P" order.

4 Touch the [OK] button.

- **Display will return to the examination search screen.**
- **The image of the order selected in step 1 will be displayed in the image display field of the order selected in step 3.**

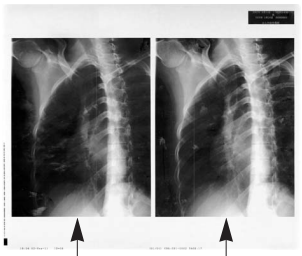
⚠ Mammo Use is not approved in the United States of America.

Print Format

Use of print formats allows aligned output on one film either of two versions of the same image each processed differently or of two different images.

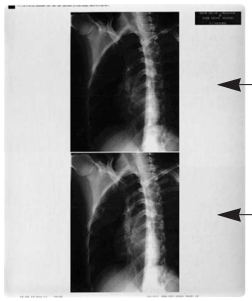
[1 on 1 Output] (From 1 Image to 2 Frames on 1 Film)

Two versions of the same exposed image may be output on one film.



Primary image **Secondary** image

Two Images Aligned Horizontally (AA)



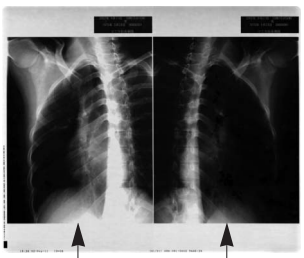
Two Images Aligned Vertically (A / A)

user tool

If this print format is frequently used, register the settings in advance in parameter keys on the user tool so that you can skip the setting procedure that has to be carried out each time the image is read.

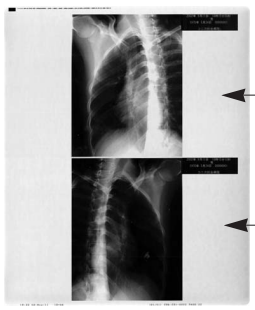
[2 on 1 Output] (From 2 Images to 2 Frames on 1 Film)

Two different exposed images may be output on one film.



First Image Second Image

Two Images Aligned Horizontally (AB)



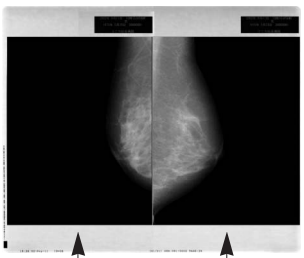
Two Images Aligned Vertically (A / B)

Primary/Secondary Image

When the image is output by "1 on 1 Output", the image on the left or at the top is referred to as the "Primary Image"; while the one at the right or the bottom is referred to as the "Secondary Image."

[2 on 1 Output] (Mammography)

Two different exposed images may be output on one film.



First Image Second Image

Two Images Aligned Horizontally (AB)

For one image to two frames, a stamp will be positioned at one location. For two images to two frames, a stamp will be positioned for each frame.
Refer to the page for “Detailed Setup” screen (Overlay).

When "equal-size output" has been selected as the method of image output and the size of the image read exceeds the output field, the image is trimmed.
Trimming is carried out using the centre of the image read as base.
User tools may be utilized to change the trimming position.

"2 on 1 Output" is possible only when the following conditions are satisfied:

- Images must belong to the same examination order.
- The setting "film size" under the print format tab must be identical.
- The setting "direction" under the print format tab must be identical.
- The setting "print format" under the print format tab must be identical.

When "full-size output" has been selected as the method of image output and the size of the image read exceeds the output field, the image size is reduced.

1 on 1 Output Procedure

1 Expose following the normal procedure.

p.36-44 **Exposure**

2 Touch the image display area for which "1 on 1 output" is to be carried out.

- **A detailed data setting screen (image processing) will be displayed.**

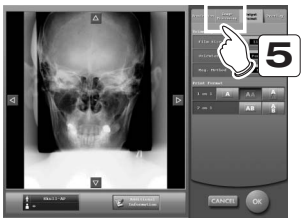
If there are images for which examination has been completed, the 1 on 1 output can be carried out through the examination history screen.

3 Touch the "Print Format" tab.

- **A detailed data setting screen (print format) will be displayed.**

4 Touch the "1 on 1" button in the "Print Format" column and select the direction in which the two images are to be aligned.

- **The white "A" character represents the printed position of the Primary image, the gray "A" character that of the Secondary image.**



(When "AA" is selected)

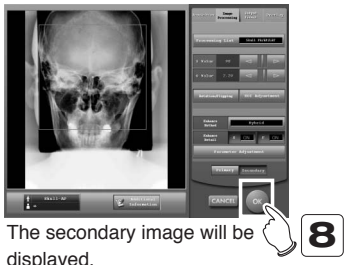
5 Set "Film Size", "Orientation" and "Mag. Method" under the "Trimming" item.

6 Touch the "Image Processing" tab.

- **A detailed data setting screen (image processing) will be displayed.**

7 Touch the [Secondary] button.

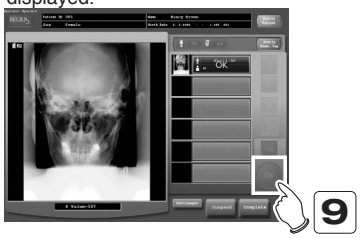
- **Check the image to be output as a secondary image.**
- **Image processing or ROI may be changed.**



The secondary image will be displayed.

8 Touch the [OK] button.

- **Display will return to the examination check screen.**



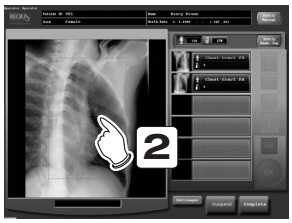
9 Touch the [OK] button to output the Image.

The image read is output in 2 frames on 1 film in accordance with set parameters. Image processing of Primary and Secondary images is carried out according to image processing conditions registered in parameter keys selected prior to exposure.
When trimming is carried out with "equal-size output" selected as the method of output, the image read is output after trimming using the image centre as base.

2 on 1 Output Procedure

1 Expose following the normal procedure.

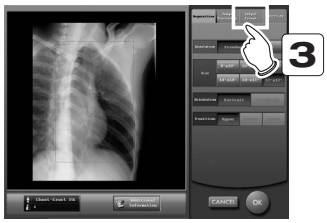
p.36-44 **Exposure**



2 Touch the image display field where "2 on 1 output" is to be carried out as a first image.

- **A detailed data setting screen (image processing) will be displayed.**

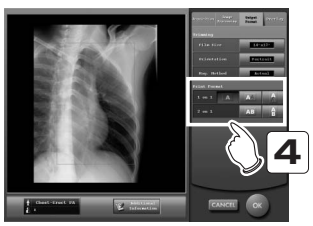
If there are images for which examination has been completed, the 2 on 1 output can be carried out through the examination history screen.



3 Touch the "Print Format" tab.

- **A detailed data setting screen (print format) will be displayed.**

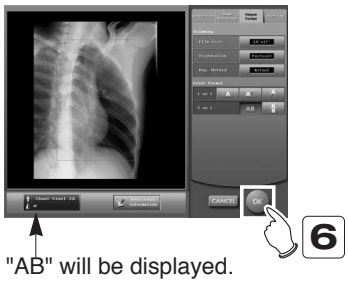
p.103
Detailed Data Setting Screen (Image Processing)



4 Touch the "2 on 1" button in the "Print Format" column and select the direction in which the two images are to be aligned.

- **The character "A" represents the printed position of the first image, the character "B" that of the second image.**
- **The relative positions of the two images are determined by the order in which they are output (by touching the "OK" button). However, these positions may be switched when the second image is output.**

p.111
Detailed Data Setting Screen (Print Format)



"AB" will be displayed.

5 Set "Film Size", "Orientation" and "Mag. Method" under the "Trimming" item.

6 Touch the [OK] button.

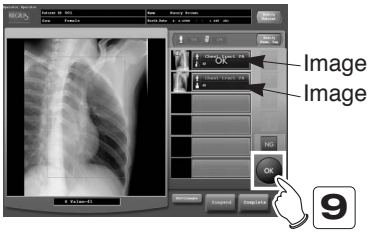
- **Display will return to the examination check screen.**

7 Repeat steps **2~6** to make "Print Format" and "Trimming" settings for the second image.

- **Settings made must be identical to those for the first image. If settings differ, the second image will be identified as the first image of a different "2 on 1 output".**

8 Touch the [OK] button for the first image (image "A") to be output.

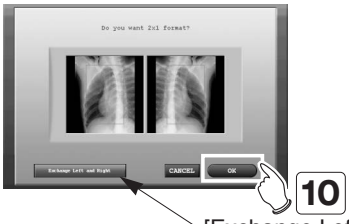
- **At this point, the image output is just set in the printer queue, not actually output to the printer.**
- **The printer icon will remain displayed in the top left corner of the image display field.**



9 Touch the [OK] button for the second image (image "B") to be output.

- **A message requesting confirmation of "2 on 1 output" will be displayed.**
- **Touching the [Right/Left Field Switch] button here will enable switching of the relative positions of images "A" and "B."**

AB is selected.

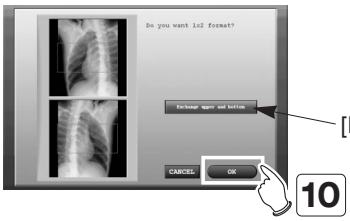


[Exchange Left and Right] button

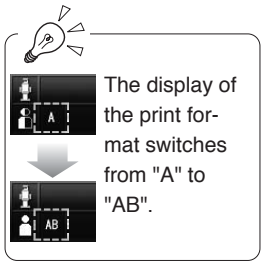
10 Touch the [OK] button.

- **Images are output in the 2 on 1 format.**

A
B is selected.



[Exchange Upper and Bottom] button



The display of the print format switches from "A" to "AB".

If the confirming message is not displayed, either the "Print Format" or "Trimming" settings for the second image may differ to those for the first image.
Check "Print Format" and "Trimming" settings and correct them so that they are same as those for the first image.

If an error has been made in the "2-on-1 output" combination, touch the "CANCEL" button. This will return the second image to its status prior to touching the "OK button.
Return the print format of the order mistakenly set to "2-on-1 output" to single-image format and set the print format of the correct second order to the "2-image" status.

If the examination is completed with only one image confirmed ([OK]), only the confirmed image is output on one side of the film.

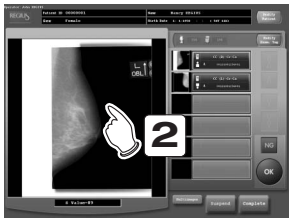
p.111
Detailed Data Setting Screen
(Print Format)

⚠ Mammo Use is not approved in the United States of America.

2 on 1 Output Procedure (Mammography)

1 Expose mammography images following the normal procedure.

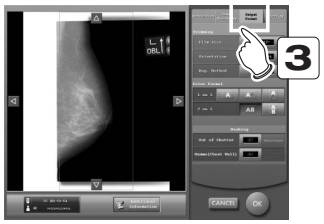
p.36-44 Exposure



2 Touch the image display field where "2 on 1 output" is to be carried out as a first image.

- **A detailed data setting screen (image processing) will be displayed.**

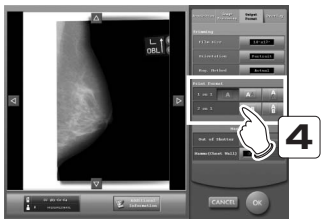
If there are images for which examination has been completed, the 2 on 1 output can be carried out through the examination history screen.



3 Touch the "Print Format" tab.

- **A detailed data setting screen (print format) will be displayed.**

p.103 Detailed Data Setting Screen (Image Processing)



4 Touch the "2 on 1" button in the "Print Format" column and select the direction in which the two images are to be aligned.

- **The character "A" represents the printed position of the first image, the character "B" that of the second image.**
- **The relative positions of the two images are determined by the order in which they are output (by touching the "OK" button). However, these positions may be switched when the second image is output.**

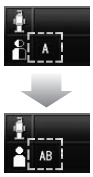
p.111 Detailed Data Setting Screen (Print Format)

"AB" will be displayed.

5 Set "Film Size", "Orientation" and "Mag. Method" under the "Trimming" item.

6 Touch the [OK] button.

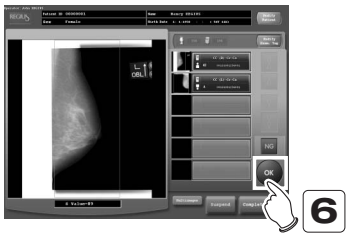
- **Display will return to the examination check screen.**



The display of the print format switches from "A" to "AB".

7 Repeat steps **2~6** to make "Print Format" and "Trimming" settings for the second image.

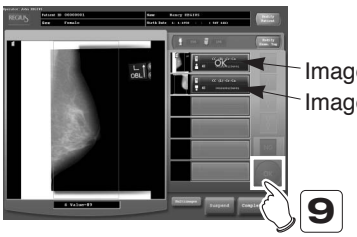
- **Settings made must be identical to those for the first image. If settings differ, the second image will be identified as the first image of a different "2 on 1 output".**



8 Touch the [OK] button for the first image (image "A") to be output.

- **At this point, the image output is just set in the printer queue, not actually output to the printer.**
- **The printer icon will remain displayed in the top left corner of the image display field.**

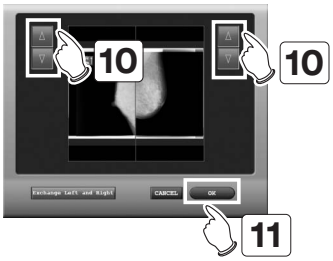
⚠ Mammo Use is not approved in the United States of America.



9 Touch the [OK] button for the second image (image "B") to be output.

- **A message requesting confirmation of "2 on 1 output" will be displayed.**
- **Touching the [Right/Left Field Switch] button here will enable switching of the relative positions of images "A" and "B."**

AB is selected.



10 Touch the [Up/Down] arrow buttons to adjust the image position in vertical level.

11 Touch the [OK] button.

- **Mammograpic Images are output in the 2 on 1 format.**

If the confirming message is not displayed, either the "Print Format" or "Trimming" settings for the second image may differ to those for the first image.
Check "Print Format" and "Trimming" settings and correct them so that they are same as those for the first image.

If an error has been made in the "2-on-1 output" combination, touch the "CANCEL" button. This will return the second image to its status prior to touching the "OK button.
Return the print format of the order mistakenly set to "2-on-1 output" to single-image format and set the print format of the correct second order to the "2-image" status.

If the examination is completed with only one image confirmed ([OK]), only the confirmed image is output on one side of the film.

p.111
Detailed Data Setting Screen
(Print Format)

Examination Suspension

One of two examination suspension screens may be displayed depending on the type of system.

- **Systems where photography for all examinations is carried out at one location.**
- **Systems where a suspended examination is continued at a different location.**

Systems where photography for all examinations is carried out at one location.

1 Touch the [Suspend] button on the examination check screen.

- **A message requesting confirmation of suspension will be displayed.**

2 Touch the [YES] button.

- **The examination check screen will be closed and the display returned to the examination list screen.**

" ⋆ " is displayed.

Systems where a suspended examination is continued at a different location.

In systems where the same examination list is displayed on multiple CS-3 units and examinations for which all photography has not been completed and may be carried out in another photography room, the following procedure should be followed to suspend examinations.

1 Touch the [Suspend] button on the examination check screen.

- **A message requesting confirmation of suspension will be displayed.**

2 Select the button corresponding to the examination room where photography is to be continued.

[Suspend]

Select when the examination is to be continued using the same CS-3.

- The examination check screen is terminated and the examination list displayed.

[Change CS-3]

The examination is displayed as suspended on a different CS-3 to the one on which the examination was suspended. The list is no longer displayed on the CS-3 on which examination was suspended.

- The examination check screen is terminated and the examination list displayed.

[Cancel]

"Examination suspension" is discontinued and the examination check screen displayed.

For the examination that is in exposure process with other CS-3, "Start" will be displayed on the line of "Suspend" item.

When the [Change CS-3] button is touched and examination continued in another room (on another CS-3), orders for which photography has been completed in the previous room will also be displayed as incomplete. Necessary photography only should be carried out and examination terminated.

When an examination has been continued on another CS-3, the examination will be shown as [suspended] for a certain length of time on the examination list even after completion.

To restart an examination in suspended status:

- When the initial screen is the examination search screen

After suspension of the examination and return to the examination search screen, the next patient data may be input. Touch the [List] button on the examination search screen to display the examination list and select patient data for the suspended examination.

- When the initial screen is the examination list screen

Select the examination displayed as " * " and touch the [Perform] button.

To delete a suspended examination:

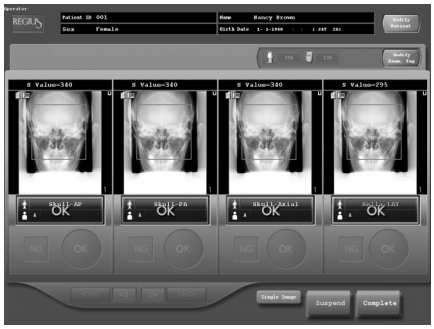
In order to prevent operational error of suspended examination data, deletion from the examination list screen is not possible.
To delete a suspended examination that is not required, restart the examination, transfer it to the examination check screen and touch the [Complete] button.

Examination Termination

To terminate examination after images for all orders have been read, touch the [Complete] button.

Single-Image Screen

Multiple-Image Screen



When Some Images have not been Confirmed

The following message is displayed.

[YES] Touching the [YES] button will make all images "OK" and terminate examination.

[NO] Touching the [NO] button will effect return to the examination check screen.

When Some Images have not been Read

The following message is displayed.

[YES] Touching the [YES] button will result in deletion of orders for which images have not been read and terminate examination.

[NO] Touching the [NO] button will effect return to the examination check screen.

When no Image has been Read

The following message is displayed.

[YES] Touching the [YES] button will terminate the examination itself.

[NO] Touching the [NO] button will effect return to the examination check screen.

Image Reference after Examination (Output Again)

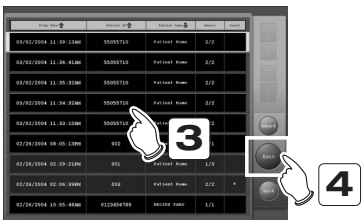
The procedures to reference and output the image after finishing examination are described below.

1 Touch the [KONICAMINOLTA] button on the initial screen.

- **The system menu is displayed.**

2 Click the [History] button.

- **The examination history screen is displayed.**

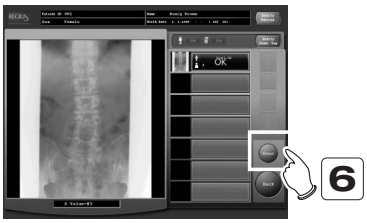


3 Touch the patient data in which the image to be referenced or output again is contained.

- **The patient data in suspend status is displayed in purple color.**
- **The frame color around the patient data that is selected will turn to green.**

4 Touch the [Edit] button.

- **The image reference screen is displayed.**

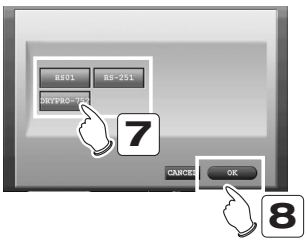


5 Touch the order to be referenced.

- **The image corresponding to the selected order is displayed in the image display field.**

6 Touch the [Output] button to output the image.

- **The output setting screen is displayed.**



7 Click the [Output Destination] button to select the output device.

8 Touch the [OK] button.

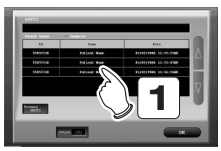
- **The image data is output to the selected output device.**
- **The output setting screen is closed.**

Only suspended examination information for which image output has been completed may be re-output.
Data for which exposure has been completed but for which image output has not will be displayed, but may not be re-output.

Because the image has not been verified as OK, the [Output] button is not active.

Multiple devices can be selected at a time as the output device.

Follow the steps below to cancel the queue that has not been output.



1. Ensure that there is the queue that has not been output in the printer status check screen or host status check screen.

2. Invoke the output setting screen.
   - **Ensure that the [Output Destination] button for the queue that has not been output is kept selected.**

3. Touch the selected [Output Destination] button to cancel the queue.

p.134 Host Status Check Screen
p.135 Printer Status Check Screen

Image Sharing

Using this function, images processed on the other console can be browsed from your console and can be reprinted. Procedures to browse the images processed on the other console and to reprint these images are described below.

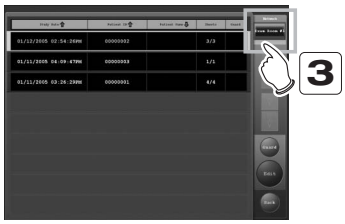
Browsing is made possible only when the setting is made so by the service engineer.

1 Touch the [KONICAMINOLTA] button on the initial screen.

- **The system menu is displayed.**

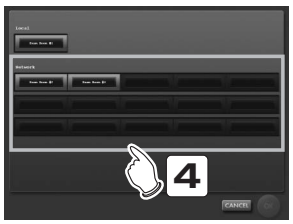
2 Touch the [History] Button.

- **The examination history screen is displayed.**



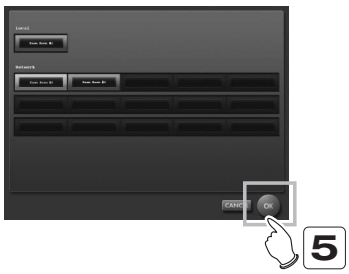
3 Touch the [Network] Button at the upper right of the examination history screen.

- **"Console Select" screen will be displayed.**
- **Name of your CS-3 will be displayed on the [Network] button.**



4 In the network field, touch the button for the Console on which the desired image resides.

- **Frame of the touched button changes to green.**
- **Name of CS-3s whose images can be browsed are shown on each button.**

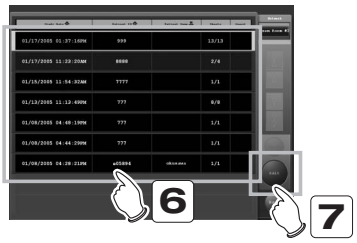


5 Touch the [OK] Button.

- **"Exam History" screen of the selected Console will be displayed. The name of CS-3 that is currently referred will be displayed at the upper right of the "Exam History" screen.**
- **Touching the button in the local column where the name of your CS-3 is shown will display the "Exam History" screen of your own CS-3.**
- **Touch the [CANCEL] button to return to the "Exam History" screen of your own CS-3.**

It may take a little longer before the "Exam History" screen of the target Console appears depending on the data size of the image stored in the target Console.

The images that can be browsed using the "Image Sharing" function are only those available at the time when the connection to the target Console is made. (step 5) Changes brought during browsing will not be updated. To update the browsing images, close the browsing screen first, then make a connection again to the target console. A message "Importing exam data. Please wait ...." will be displayed during update process.

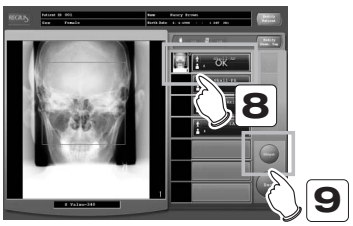


6 Touch the Patient Info that contains the images to be browsed or reprinted.

- **Suspended Patient Info is displayed in purple.**
- **The frame of the selected Patient Info changes to green.**

7 Touch the [Edit] Button.

- **"Image Reference" screen will be displayed.**

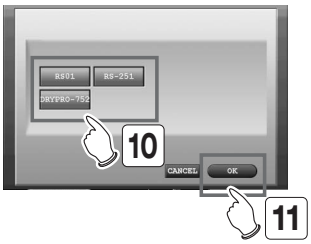


8 Touch the order whose image shall be referred.

- **Image of the selected order will be displayed in the image display field.**
- **Image processing or overlay setting as practiced in "Exam Check" screen can be possible on this screen as well.**

9 Touch the [Output] to make a reprint.

- **"Output Setup" screen will be displayed.**



10 Select the [Device Select] button of the output device (output devices set to your own Console) from which the image shall be output.

11 Touch the [OK] Button.

- **Output of the image will be made to the selected output device.**
- **Return to the "Image Reference" screen after closing the "Output Setup" screen.**

Changes on Exam Condition, Image Processing and Overlay will be made using the settings of your own console.

Output devices set on the "Output Setup" screen are those set on your own Console. Actual output is also performed from your own Console.

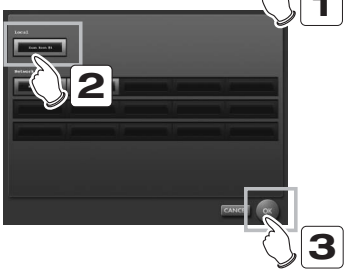
Multiple output devices can be selected at a time.

Exiting the Image Reference/Reprint

Procedures to exit the image reference/reprint and to return to the "Exam History" screen of your own Console is described below.

1 Touch the [Back] Button at the bottom right of the examination history screen.

- **"Console Select" screen will be displayed.**
- **Name of the target CS-3 that is under reference will be shown on the [Network] button.**

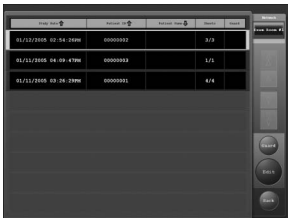


2 Touch the button in the local column (name of your own CS-3 is displayed).

- **Frame of the touched button changes to green.**

3 Touch the [OK] Button.

- **Returns to the "Exam History" screen of your own CS-3.**
- **Touching the [CANCEL] button will switch to the target CS-3 that has been referred to.**



Overlay

CS-3 allows texts to be printed as an overlay on the printed film.
Overlay function includes “Marker” or “Stamp” that allows prescribed text strings to be printed at the specified position, “Grid/Scale” that allows the grid or scale layer to be layed over the image and “Annotation” that allows text strings to be allocated at any position.
These functions can be used in combination or alone by itself.

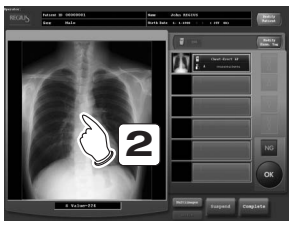
> “Marker”, “Stamp” and “Grid/Scale” can be predefined in the Exam Condition using the User Tool. This is therefore useful to predefine and register “Marker”, “Stamp” or “Grid/Scale” using the User Tool especially when any of these is required to be overlaid for every output.

> It is not possible to allocate two or more same overlays. For example, it is not possible to select Grid and Scale at the same time from “Grid/Scale”. However, it is possible to select one each from Marker1 and Marker2.

Allocating Marker, Stamp or Grid/Scale

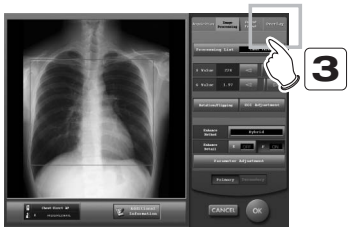
Procedures to allocate Marker, Stamp or Grid/Scale is described below.

1 Expose following the normal procedure.



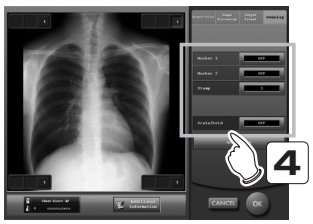
2 Touch the image area of the order on which an overlay should be allocated.

- **“Detailed Data Setting” screen (Image Processing) will be displayed.**



3 Touch the [Overlay] tab.

- **“Detailed Data Setting” screen (Overlay) will be displayed.**

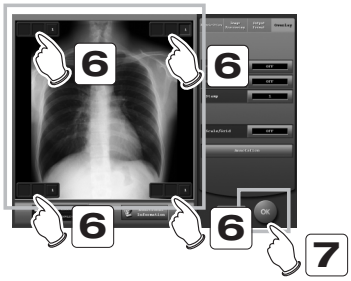


4 Touch the [Marker1], [Marker2], [Stamp], or [Scale/Grid] button.

- **Touching [Marker1] button will display “Marker1 Select” screen.**
- **Touching [Marker2] button will display “Marker2 Select” screen.**
- **Touching [Stamp] button will display “Stamp Select” screen.**
- **Touching [Grid/Scale] button will display “Grid/Scale Select” screen.**

5 Touch the [Marker], [Stamp] or [Grid/Scale] that should be allocated on the film.

- **Selected "Marker", "Stamp" or "Grid/Scale" will be registered, and returns to the "Detailed Data Setting" (Overlay) screen.**
- **Selected "Marker", "Stamp" or "Grid/Scale" will be displayed in the image display field.**

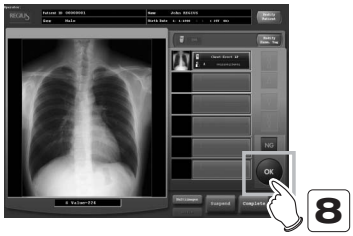


6 When the "Marker" or "Stamp" is selected, touch the position where the Marker or Stamp should be allocated.

- **Marker or Stamp will move to the selected position.**

7 Touch the [OK] Button.

- **Returns to the "Exam Check" screen.**



8 Touch the [OK] button of the order in which the [Marker], [Stamp] or [Grid/Scale] has been allocated.

- **Output of the image starts, and small icons indicating the printer and host will be displayed at the upper left of the image display field.**
- **Upon completion of output to each device, the icons will disappear.**
- **Selected "Marker", "Stamp" or "Grid/Scale" will be allocated and film will be printed.**

Destination printer name will be displayed at the upper left of "Marker1 Select", "Marker2 Select", "Stamp Select" and "Grid/Scale Select" screen.

Overlay allocation described in the above can also be applied to the scanned images in the "Exam History" screen.
However, when there are multiple printers are connected t to the CS-3, print out of the order selecting the overlay position is only capable from one printer. The name of the printer from which the order can be printed with the overlay position selected will be displayed at the upper left of each screen, that is "Marker1 Select", "Marker2 Select", "Stamp Select" and "Grid/Scale Select" screen. When a reprint is required, always select the printer selected here.

Allocating the Annotations

Procedures to allocate the annotations are described below.

Mouse and keyboard may be necessary to operate some of annotation functions.

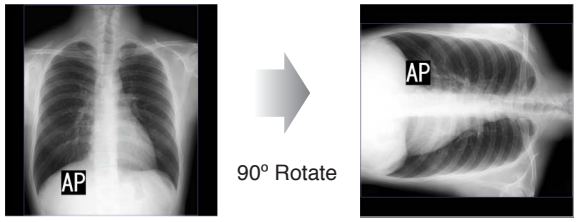
Maximum 10 annotations can be allocated.

Maximum number of characters that can be used for annotation is 128 (full size) or 256 (half size) characters.

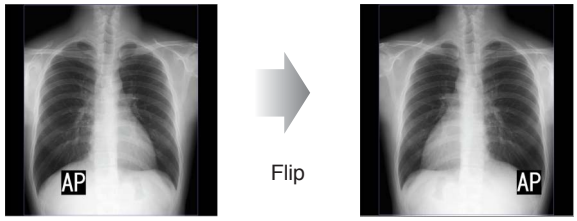
Relation between Annotation and Rotation/Flip

How it is look like when the image is rotated or flipped after the annotation has been allocated. The upper left corner of text box for the annotation is interlocked with the image, but the text itself will not rotate or flip.

• Rotation



• Flip

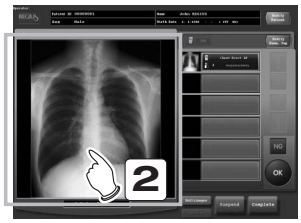


Annotation font size and output method (1 to 1/ whole image output)

When the whole image is output after allocating the annotation, the annotation fonts are reduced in proportion to the image so that the whole image fits to the output size. This results in output of annotation font size not identical to the “Font Size” set in the “Annotation” screen.

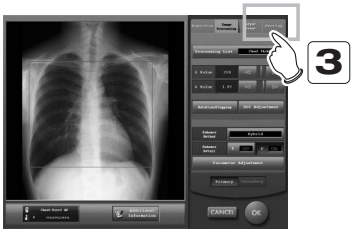
When a large image, especially a long body part is output to a smaller film by setting to “Whole Image” output, it may be necessary to set the annotation with a little larger font. Also to be noted is that even the output is made under the same font size and output method, output font size may be slightly different depending on the resolution (Normal/High Res).

1 Expose following the normal procedure.



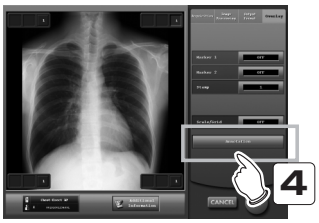
2 Touch the image area of the order on which an overlay should be allocated.

- **"Detailed Data Setting" screen (Image Processing) will be displayed.**



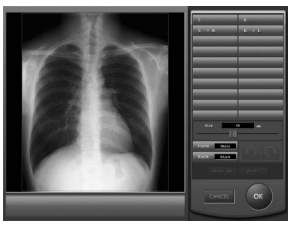
3 Touch the [Overlay] tab.

- **Detailed Data Setting Screen (Overlay) will be displayed.**



4 Touch the [Annotation] button.

- **"Annotation Setup" screen will be displayed.**

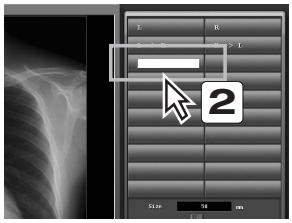


1) Registering the text string on the preset buttons

Annotations can be preset on the [Annotation] buttons using the “Annotation Setup” screen.

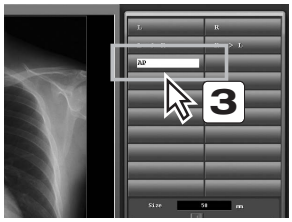
1 Place the mouse button over the preset button and right-click the mouse.

- **Cursor blinks over the selected preset button.**



2 Input the text strings using the keyboard.

Maximum count of characters for preset button is 7 (full size) or 14(half size) characters.



3 Press the [Enter] key of the keyboard.

- **Text string will be registered on the preset button.**

Deleting the text string from the preset button.
Right-click the mouse over the preset button from which the text string should be deleted to display the cursor, and delete the text string by pressing the [Delete] or [Back Space] key on the keyboard.

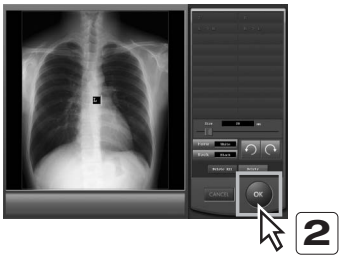
Once the text string is registered on the preset button, it will be retained even after turning the power OFF.

2) Allocating the annotation assigned to the preset buttons

Procedures to allocate the annotation that has been assigned to the preset button is described below.

1 Touch the preset button that should be allocated and on which the text string has been registered.

- **Selected text string for the preset button will be allocated at the upper left of the image display field.**

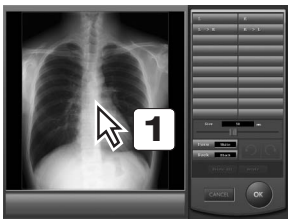


2 Click the [OK] button or left-click the mouse in the area other than annotation.

- **When the [OK] button is clicked, returns to the "Detailed Data Setting" (Overlay) screen after allocating the annotation.**
- **When the area other than annotation is clicked, switches the status to the one where the next annotation can be allocated after the first annotation is allocated.**

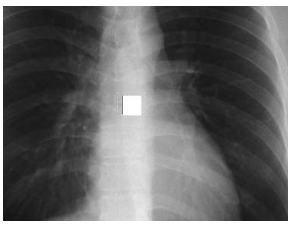
3) Directly allocating any text strings

Procedures to allocate in the image display field the text strings not registered on the preset button is described below.



1 Left-click the mouse over the position where an annotation should be allocated.

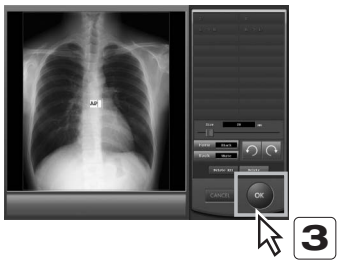
- **Cursor blinks over the selected position in the image display field.**



2 Input the text strings using the keyboard.

- **Pressing the [Enter] on the keyboard allow a line break, and annotation of several lines can be input.**

Left-clicking the mouse over the annotation already present switches the mode to the one where the current annotation can be edited.

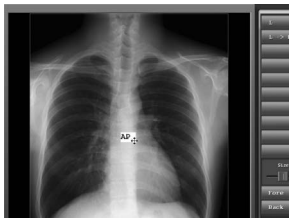


3 Click the [OK] button or left-click the mouse in the area other than annotation.

- **When the [OK] button is clicked, returns to the "Detailed Data Setting" (Overlay) screen after allocating the annotation.**
- **When the area other than annotation is clicked, switches the status to the one where the next annotation can be allocated after the first annotation is allocated.**

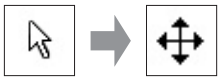
4) Displacing the allocated annotation

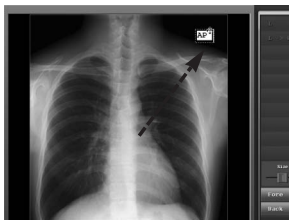
Procedures to displace the allocated annotation are described below.



1 Move the cursor over the allocated annotation.

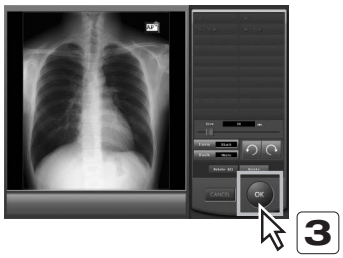
- **The cursor changes from the arrow to the cross.**





2 Hold and drag the annotation to the desired position.

- **The annotation moves to the point to which it is dragged.**



3 Click the [OK] button or left-click the mouse in the area other than annotation.

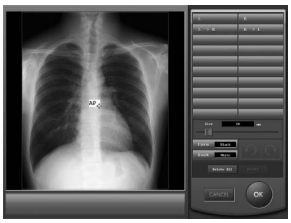
- **When the [OK] button is clicked, returns to the "Detailed Data Setting" (Overlay) screen after allocating the annotation.**
- **When the area other than annotation is clicked, switches the status to the one where the next annotation can be allocated after the first annotation is displaced.**

5) Changing the text string of the annotation

Procedures to change the text strings of the annotation are described below.

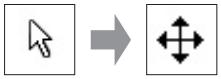
Changes cannot be made on the rotated annotation. First, restore the original status that is not rotated, then change the text strings.

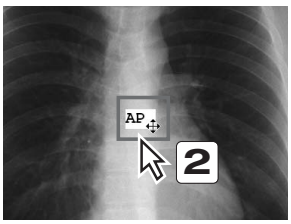
p.72 Rotating the allocated annotation



1 Move the cursor over the allocated annotation.

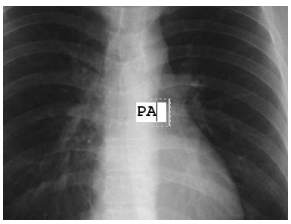
- **The cursor changes from the arrow to the cross.**





2 Left-click the mouse.

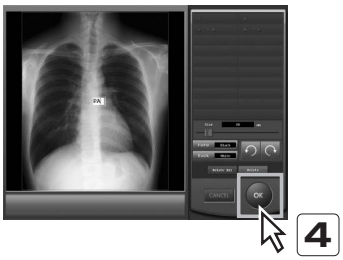
- **Cursor blinks over the selected annotation.**



3 Change the text strings using the keyboard.

- **Pressing the [Enter] on the keyboard allow a line break, and annotation of several lines can be input.**

When the text strings are selected, they change the color to “Black” when the background is black, to “White” when the background is white, to “Blue” when the background is transparent.

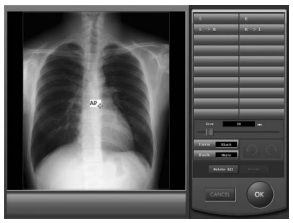


4 Click the [OK] button or left-click the mouse in the area other than annotation.

- **When the [OK] button is clicked, returns to the “Detailed Data Setting” (Overlay) screen after changing the annotation.**
- **When the area other than annotation is clicked, switches the status to the one where the next annotation can be allocated after the change is effected.**

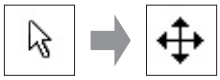
6) Rotating the allocated annotation

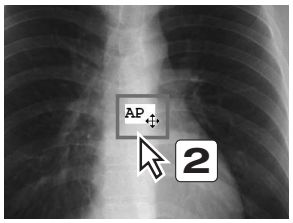
Procedures to rotate the allocated annotation are described below.



1 Move the cursor over the allocated annotation.

- **The cursor changes from the arrow to the cross.**



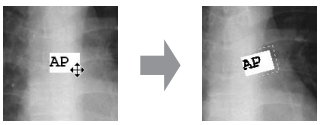


2 Left-click the mouse.

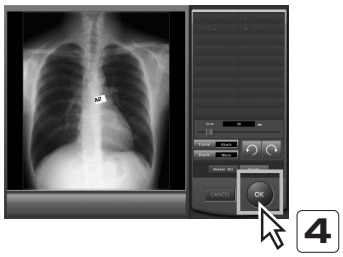
- **Cursor blinks over the selected annotation.**

3 Click the [Rotate] button.

- **Text string rotate by 15º every time the button is clicked.**
- **Click the clockwise arrow to rotate the text string clockwise.**
- **Click the counterclockwise arrow to rotate the text string counterclockwise.**



Ex) 15º rotation counterclockwise



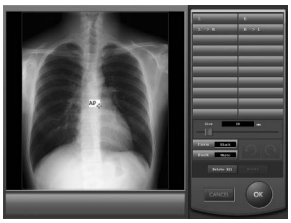
4 Click the [OK] button or left-click the mouse in the area other than annotation.

- **When the [OK] button is clicked, returns to the "Detailed Data Setting" (Overlay) screen after rotating the annotation.**
- **When the area other than annotation is clicked, switches the status to the one where the next annotation can be allocated after the rotation is effected.**

The text strings of the rotated annotation cannot be changed. Text can be changed only after restoring the original status where the annotation is not rotated. Font size, font color and background color can be changed even in the rotated status.

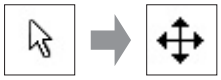
7) Changing the font size of allocated annotation

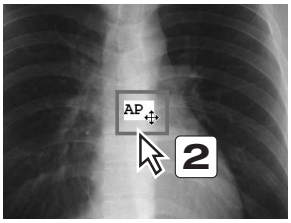
Procedures to change the font size of the allocated annotation are described below. Font size can be changed within the scope of 10mm ~ 100mm (0.4in ~ 4.0in).



1 Move the cursor over the allocated annotation.

- **The cursor changes from the arrow to the cross.**



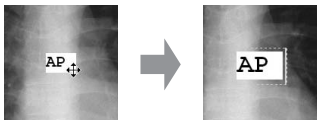


2 Left-click the mouse.

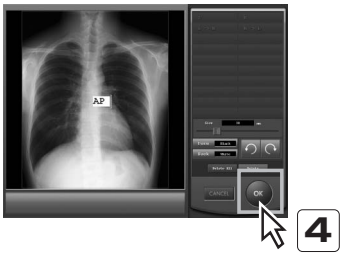
- **Cursor blinks over the selected annotation.**

3 Hold down the left mouse button and drag the font size slider.

- **Dragging the slider increases or decreases the font size.**
- **Drag to the left to decrease the font size.**
- **Drag to the right to increase the font size.**



Ex) Changing the size from 20mm to 30mm



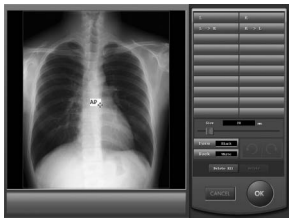
4 Click the [OK] button or left-click the mouse in the area other than annotation.

- **When the [OK] button is clicked, returns to the "Detailed Data Setting" (Overlay) screen after rotating the annotation.**
- **When the area other than annotation is clicked, switches the status to the one where the next annotation can be allocated after the font size is changed.**

Unit of the font size (mm or inch) shall be set up by the service engineer at the time of installation.

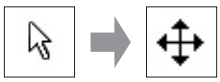
8) Changing the color or background color of allocated annotation

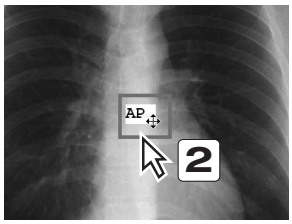
Procedures to change the text color or background color of the allocated annotation are described below. Select the text color from “White” and “Black”, while the background from “White”, “Black” and “Transparent”.



1 Move the cursor over the allocated annotation.

- **The cursor changes from the arrow to the cross.**





2 Left-click the mouse.

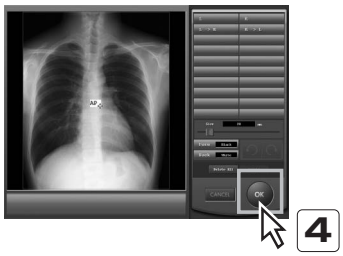
- **Cursor blinks over the selected annotation.**

3 Click the [Fore] or [Back] button, and select the color for text (fore) or background (Back).

- **Display changes as it is clicked.**

Text color and background color are interlinked.
Selecting “White” for text allows only “Black” or “Transparent” to be selected for the background.
Selecting “Black” for text allows only “White” or “Transparent” to be selected for the background.

When the text strings are selected, they change the color to “Black” when the background is black, to “White” when the background is white, to “Blue” when the background is transparent.

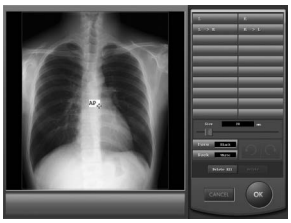


4 Click the [OK] button or left-click the mouse in the area other than annotation.

- **Text color and background color of the annotation will be effected.**
- **Next annotation is ready to be allocated.**

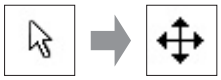
9) Deleting one of allocated annotations.

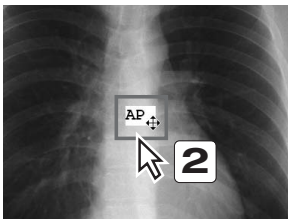
Procedures to delete one of annotations that have been allocated.



1 Move the cursor over the allocated annotation.

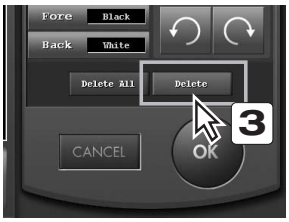
- **The cursor changes from the arrow to the cross.**





2 Left-click the mouse.

- **Cursor blinks over the selected annotation.**
- **[Delete] button becomes active. (Button color changes from gray to yellow)**



3 Click the [Delete] button.

- **A message confirming deletion of the annotation will be displayed.**

4 Click the [YES] button.

- **Selected annotation will be deleted.**
- **Clicking the [NO] button returns to the "Annotation Setup" screen without deleting the annotation.**

10) Deleting all allocated annotations.

Procedures to delete all annotations that have been allocated are described below.

1 Click the [Delete All] button.

- **A message confirming deletion of all annotations will be displayed.**

2 Click the [YES] button.

- **All annotations will be deleted.**
- **Clicking the [NO] button returns to the "Annotation Setup" screen without deleting the annotation.**

4

Description of Screens

This chapter describes each of the CS-3 screens.

Examination Search Screen

(When the examination search screen has been set as the initial screen)

This is the initial screen displayed when CS-3 is activated.

- **Patient data may be input and registered on the reservation list.**
- **Patient data already on the reservation list may be modified.**
- **Examination is initiated using patient data displayed in the patient data display window.**

p.28 Before Examination
p.31 Patient Data Input (Input from CS-3)
p.32 Patient Data Input (Search from Data Base)

In cases of patients for whom there is input in patient data items displayed in yellow (selection of data "Possibility" or "Pregnancy" under "pregnancy"), an exclamation mark (!) is displayed in the left corner of the patient data list and on the patient data amendment screen.

or

Patient Data Display

Items of patient data are displayed.
To input data into an item, touch the input window at the right of that item.
Patient data is displayed over multiple screen pages.

Depending on the setting, there may be cases where a new patient ID is automatically created when the screen is displayed.

Display of Order/Pending

The number of patient data already reserved and of examinations in suspended status are displayed.

Input Panel (Touch panel)

This panel is for input of patient data.
Display changes depending on which item is selected from the patient data display.

- **For items requiring character or numerical input, data will be displayed in a format matching the item (alphabetical/numerical characters).**
- **For items where the selected branch is set, a branch selection button is displayed.**

The determination of which patient data is to be used should be made depending on the facility when the system is installed.

p.25 Using the Input Panel

[KONICAMINOLTA] Button

Used to display the system menu screen.
If an error occurs on the CS-3 or any other device connected to the CS-3 such as a input/output device, the [REGIUS] button is displayed in red color.

p.128 System Menu Screen

Color of the [KONICA MINOLTA] button.
Black : Normal
Red : Error occurred

Scroll Button [△・▽]
Used to scroll patient data display pages.
The current page is shown on the button.

[Search] Button
Used to search patient data.
This button is displayed only with basic system or the search-type system.
- **The search result screen is displayed.**

p.94 **Search Result Screen**

[Clear] Button
Used to delete all items of patient data currently displayed.

[Exam. List] button
Used to check patient data already reserved.
- **The examination list screen that shows a patient data list is displayed.**

p.79 **Examination List Screen (When the examination search screen has been set as the initial screen)**

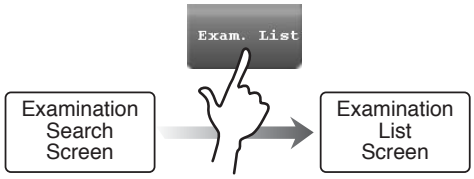
[Perform] Button
Used to initiate exposure and reading using patient data displayed in the list display of patient data.
- **The examination check screen is displayed if exposure parameters are already set.**
- **If exposure parameters are not yet set, the exposure parameter selection screen is displayed.**

p.81, 85 **Examination Check Screen [Single-Image Screen] [Multiple-Image Screen]**

p.98 **Body Part/ Parameter Selection Screen**

Examination List Screen
(When the examination search screen has been set as the initial screen)

This screen is used to give a list display of patient data input on the examination list screen.
- **Patient data to be used for examination may be selected from reserved patient data.**
- **Patient data already reserved may be deleted.**



Patient ID
Patient Name
Sex
Birth Date
Department
Location (Ward)
Exam. Tag
Sheets
Status
001 Nancy Brown Female 01/01/1980 0/0
55055710 Patient Name Male 01/15/1973 Chest - Erect AP 0/2
32116284 Patient Name - / / No Exam - No Exam 0/2
55055710 Patient Name Male 01/15/1973 Chest - Erect AP 0/2
55055710 Patient Name Male 01/15/1973 Chest - Erect AP 0/2
55055710 Patient Name Male 01/15/1973 Chest - Erect AP 0/2
55055710 Patient Name Male 01/15/1973 Chest - Erect AP 0/2
55055710 Patient Name Male 01/15/1973 Chest - Erect AP 0/2
Delete
Refresh
CANCEL
OK

Patient data items displayed will differ depending upon settings.

Schedule/Pending
The number of patient data already reserved and of examinations in suspended status are displayed.

Patient ID	Patient Name	Sex	Birth Date	Department	Location (Ward)	Exam. Tag	Sheets	Status
001	Nancy Brown	Female	01/01/1980				0/0	
55055710	Patient Name	Male	01/15/1973			Chest - Erect AP	0/2	

List Display of Patient Data

Reserved patient data, exposure parameters, and exposure counts are displayed.
Touching any line of patient data will result in selection of that data and display of the data in a green frame in green and blue characters.
An asterisk " * " is displayed in the "suspend" column against patient data for which examination has been restarted and suspended on the examination check screen.

- **8 reserved patient data are displayed on one screen. Where there are more than 9 reserved data, the scroll button may be used to scroll down the list.**
- **Touching the title of an item of patient data allows that item name to be used as a key for patient data sorting. One touch results in display in ascending order, one more touch in descending order.**
- **The suspended patient data is displayed in a purple color.**

In cases of patients for whom there is input in patient data items displayed in yellow (selection of data "Possibility" or "Pregnancy" under "pregnancy"), an exclamation mark (!) is displayed in the left corner of the patient data list and on the patient data amendment screen.

or

Scroll Button [△・▽]
Scrolls the list one patient data at a time.

Scroll Button [⏫・⏬]
Scrolls the list 8 patient data at a time.

[Delete] Button
Deletes the current selected patient data from the reservation list.

[Refresh] Button
Updates the patient data list from the data base.

[CANCEL] Button
Returns to the examination search screen.

- **When examination data being edited on the examination search screen has been saved, that patient data will be displayed and can be edited continuously.**
- **When examination data being edited on the examination search screen has not been saved, input of new patient data is allowed.**

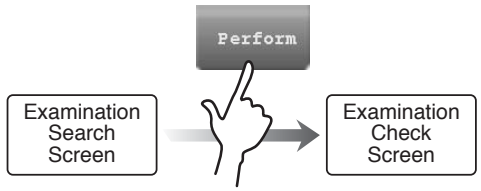
p.78 Examination Search Screen (When the examination search screen has been set as the initial screen)

[OK] Button
Returns to the examination search screen.

- **Patient data selected from the examination list screen is displayed on the examination search screen.**

Examination Check Screen [Single-Image Screen]

This screen is used for checking examination data, reading cassette images and execution of exposure in upright position reader. One large screen is displayed. The image read after completion of exposure is displayed.



Patient Data Display

Patient data to be used for exposure is displayed.

- **In cases where the patient data is insufficient or wrong, touch the [Modify Patient] button to modify the patient data.**

[Modify Patient] Button

Used to modify the patient data.

Order List Display

A list of orders set in patient data is displayed in button format.

Orders to be used for examination and reading may be selected prior to exposure.

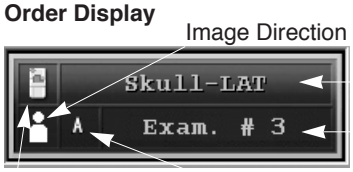
<When Using REGIUS 170/190>
Select an order and register a corresponding cassette using a bar code reader.

After exposure, depending on the image quality, the image is either output (print or save) [OK] or erased [NG]. Touching an order will result in selection of that order and display of the order in a green frame.

An asterisk " * " is displayed in the "suspend" column against patient data for which examination has been restarted and suspended on the examination check screen.

- **Data for up to 6 set orders are displayed on one screen. Where there are more than 7 orders set, the scroll button may be touched to scroll down the list.**
- **A reduced image is displayed to the left of the button for orders for which exposure has been completed.**
- **[OK] is displayed for orders for which exposure has been completed and that have been output.**

Order Display



[Reader Device]
The reader device used for exposure is displayed as an icon.

350

170

[Image Direction]
Displays the image direction, "Front/Reversal" or "Rotated".

0° / Front 90° / Front 180° / Front 270° / Front

0° / Reversal 90° / Reversal 180° / Reversal 270° / Reversal

[Image Format]
Displays the print format of the image.

- A — Single display of the image printed as it is.
- AA — Two displays of the same image printed aligned left and right.
- A / A — Two displays of the same image printed aligned vertically.
- AB — Two images printed aligned left and right.
- A / B — Two images printed aligned vertically.

Image Direction
The direction set in the exposure parameters is displayed. When changes in settings are made to the "Rotation/Flipping" parameters on the Detailed Data Setting Screen (Image Processing), the display is amended according to those changes.

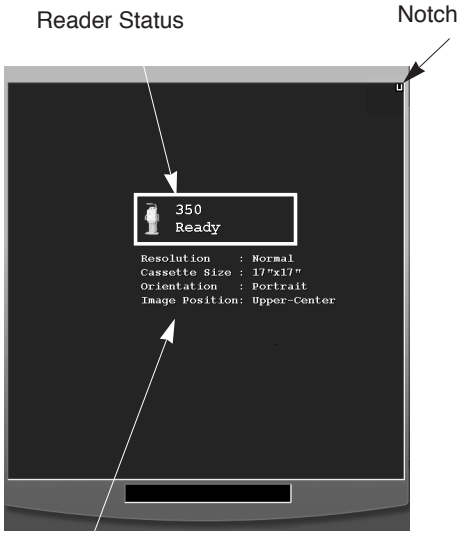
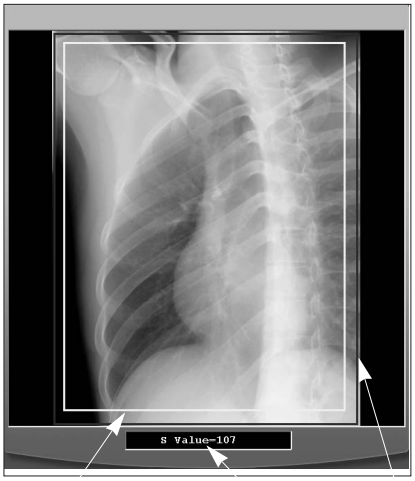


Image Display Field
<Prior to exposure>
The exposure parameters and reader status are displayed.

- **To make detailed data settings relating to exposure and output, touch the screen within the frame.**

Notch mark
The rotation/inversion status of the image read is displayed directly.
Display of the (U) mark at the top right of the screen indicates no-inversion/no-rotation status.

Display/none-display of the notch mark and X-ray unit depends upon settings



Masking frame (Irradiation field) (Yellow)

S-Value Display

Trimming frame (Blue)

Image Display Field
<After exposure>
The exposed image and its S-value are displayed.
The trimming frame set on the detailed data setting screen (print format) is shown as a blue frame.
The X-ray irradiated area is shown in a yellow frame. (Displayed only on images exposed with the masking irradiation field "ON.")

- **To make detailed data settings relating to exposure and output, touch the screen within the frame.**

p.101, 103, 111, 118
Detailed Data Setting Screen
(Acquisition)
(Image Processing)
(Print Format)
(Overlay)

Reader Status
The reader status and exposure parameters for the selected order are displayed.

- **Ready**
  The reader status for the selected order is ready to expose.
- **Erasing**
  The reader status for the selected order is now erasing. When the erasure is completed, the display changes to "Ready".
- **Initializing**
  The reader status for the selected order is now initializing. When the initializing is completed, the display changes to "Ready".

Change Reader Button
Used to change the reader device used in the order selected from the order list display.
The reader type of the current order (upright<350>/cassette<170>) is displayed.

[Upright] Button
Selects the upright reader.

[C-Reader] Button
Selects the cassette reader.

[Modify Exam. Tag] Button
Enables changes to the parameters (reader, parameter keys) of the order selected from the list.

- **New orders may be added.**

Scroll Button [△ · ▽]
Scrolls the order list one order at a time.

Scroll Button [⏫ · ⏬]
Scrolls the order list 6 orders at a time.

[NG] Button
Erases the image of the selected order after exposure.
- **An order for which OK has been selected cannot be erased.**

p.49 Image Erasing
p.51 Image Substitution

[OK] Button
Outputs the image for the selected order after exposure.
Where the automatic confirmation function is valid, the time remaining until confirmation is automatically displayed below the button.

user tool

Following things can be set through the user tool.
- **Whether the automatic confirmation function is valid or not.**
- **Time remaining until confirmation.**

[Multi images] Button
Used to switch to the multiple-image.

[Stitch] Button
Displays the “Composite Image Select” screen. Selection is enabled when there is an order for long body parts and the exposure is actually completed.

p.173 Image Stitching Process

“Stitch” function is an option. On the CS-3 that has not incorporated this option, “Composite Image Select” screen or “Composite Image Adjustment” screen will not be displayed.

[Suspend] Button
Holds the examination currently being executed and returns to the initial screen (examination search screen or examination list screen).
- **The examination put in hold status remains on the examination list.**

p.45 Image Output [Single-Image Format Output per Order]
p.85 Examination Check Screen [Multiple-Image Screen]

[Complete] Button
Terminates examination and returns to the initial screen (examination search screen or examination list screen).
- **In cases where exposure is not completed or when an order not yet confirmed (not OK) remains, an operation confirmation screen is displayed.**

p.58 Examination Suspension
p.78 Examination Search Screen (When the examination search screen has been set as the initial screen)

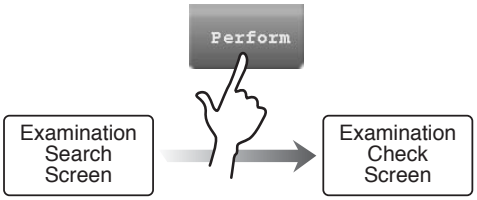
[REGIUS] Button
Used to check the status of input/output devices connected to CS-3 (reader device, host, printer, RIS) as well as the capacity used and remaining in the CS-3 hard disk.
If an error occurs on the CS-3 or any other device connected to the CS-3 such as a input/output device, the [REGIUS] button is displayed in red color.
- **The Device Status Screen is displayed.**

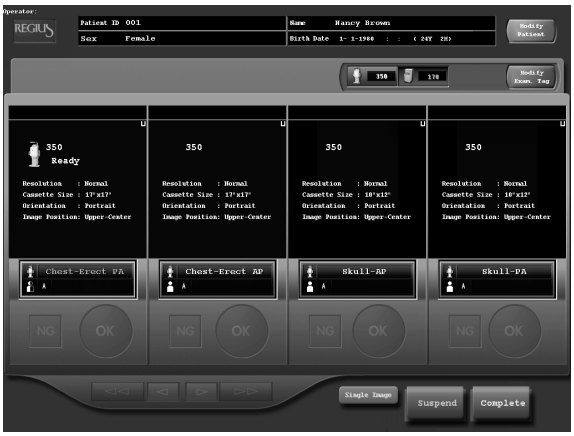
p.60 Examination Termination
p.129 Device Status Screen

Color of the [REGIUS] button.
Black : Normal
Red : Error occurred

Examination Check Screen [Multiple-Image Screen]

Examination data checks and execution of exposure/read operation may be executed from this screen.
Four images are displayed in alignment. Images read after execution of exposure are displayed.





Patient Data Display
A part of the patient data to be used for exposure is displayed.

- **In cases where patient data is insufficient or wrong, touch the [Modify Patient] button to modify the patient data.**

[Modify Patient] Button
Used to modify the patient data.

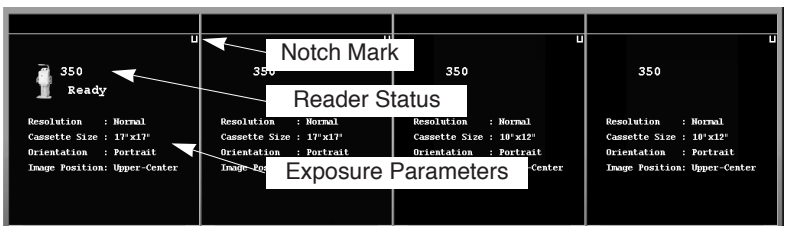
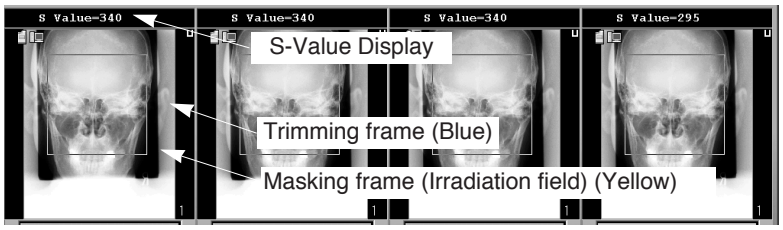


Image Display Field <Prior to exposure>
The exposure parameters and reader status are displayed.

Notch mark
The rotation/inversion status of the image read is displayed directly.
Display of the ( ) mark at the top right of the screen indicates no-inversion/no-rotation status.



Display/none-display of the notch mark and X-ray unit depends upon settings

Image Display Field <After exposure>
The exposed image and its S-value are displayed.
The trimming frame set on the detailed data setting screen (print format) is shown as a blue frame.
The X-ray irradiated area is shown in a yellow frame.
(Displayed only on images exposed with the masking irradiation field "ON.")

- **To make detailed data settings relating to exposure and output, touch the screen within the frame.**

p.101, 103, 111, 118 Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)

Order List Display
A list of orders set in patient data is displayed in button format. Orders to be used for examination and reading may be selected prior to exposure. After exposure, depending on the image quality, the image is either output (print or save) [OK] or erased [NG]. Touching an order will result in selection of that order and display of the order in a green frame.

- **[OK] is displayed for orders for which exposure has been completed and that have been output.**

Change Reader Button
Used to change the reader device used in the order selected from the order list display.
The reader type of the current order (upright<350>/cassette<170>)
is displayed.

[Upright] Button
Selects the upright reader.

[C-Reader] Button
Selects the cassette reader.

[Modify Exam. Tag] Button
Enables changes to the parameters (reader, parameter keys) of the order selected from the list.

- **New orders may be added.**

[NG] Button
Erases the image of the selected order after exposure.

- **An order for which OK has been selected cannot be erased.**

p.49 Image Erasing

p.51 Image Substitution

[OK] Button
Outputs the image for the selected order after exposure.
Where the automatic confirmation function is valid, the time remaining until confirmation is automatically displayed below the button.

[Multi images] Button
Used to switch to the multiple-image.

[Stitch] Button
Displays the “Composite Image Select” screen.
Selection is enabled when there is an order for long body parts and the exposure is actually completed.

“Stitch” function is an option. On the CS-3 that has not incorporated this option, “Composite Image Select” screen or “Composite Image Adjustment” screen will not be displayed.

[Suspend] Button
Holds the examination currently being executed and returns to the initial screen (examination search screen or examination list screen).
- **The examination put in hold status remains on the examination list.**

[Complete] Button
Terminates examination and returns to the initial screen (examination search screen or examination list screen).
- **In cases where exposure is not completed or when an order not yet confirmed (not OK) remains, an operation confirmation screen is displayed.**

[REGIUS] Button
Used to check the status of input/output devices connected to CS-3 (reader device, host, printer, RIS) as well as the capacity used and remaining in the CS-3 hard disk.
If an error occurs on the CS-3 or any other device connected to the CS-3 such as a input/output device, the [REGIUS] button is displayed in red color.
- **The Device Status Screen is displayed.**

Following things can be set through the user tool.
- **Whether the automatic confirmation function is valid or not.**
- **Time remaining until confirmation.**

p.45 Image Output [Single-Image Format Output per Order]

p.173 Image Stitching Process

p.85 Examination Check Screen [Multiple-Image Screen]

p.58 Examination Suspension

p.78 Examination Search Screen (When the examination search screen has been set as the initial screen)

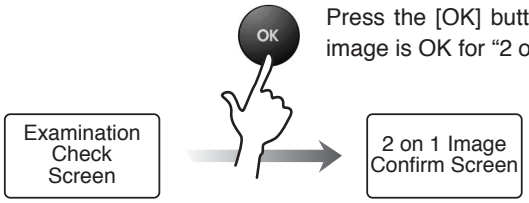
p.60 Examination Termination

p.129 Device Status Screen

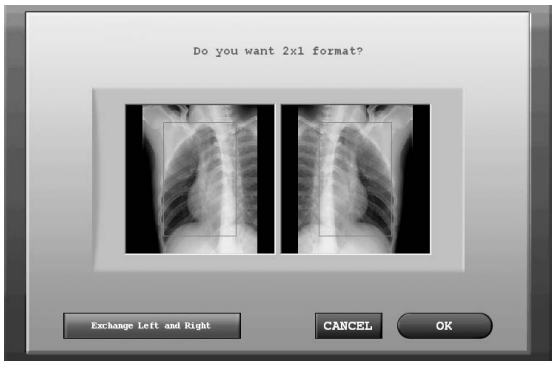
Color of the [REGIUS] button.
Black : Normal
Red : Error occurred

2 on 1 Image Confirm Screen (except mammo images)

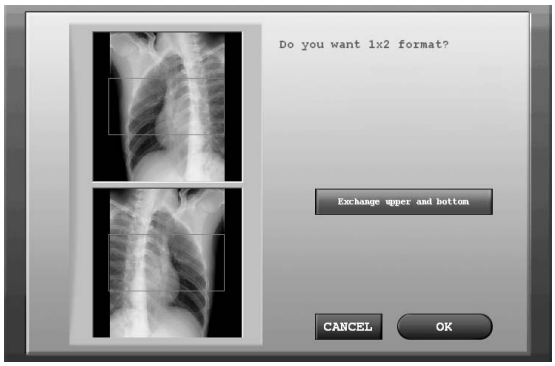
On this screen, image layout for “2 on 1output” can be checked and modified.
Selection can be made from horizontal and vertical alignments.



Press the [OK] button after the first image is OK for “2 on 1 Output”.



Horizontally aligned (AB)



Vertically aligned (A / B)

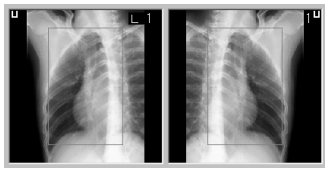


Image Position Check Field

Displays the layout of each image in 2 on 1 output.

[Exchange left and right (upper and bottom] Button

Switch the positions of the image between the two.
Right and left (upper and lower) images switch their positions every time the button is pressed.

[CANCEL] Button

Cancels the 2 on 1 output.
- **Returns to “Exam Check” screen.**

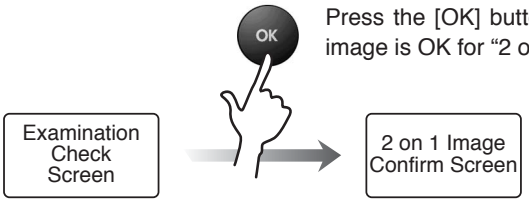
[OK] Button

Execute the “1 on 2 Output” using the layout displayed in the “Image Position Check Field”.
- **Returns to “Exam Check” screen.**

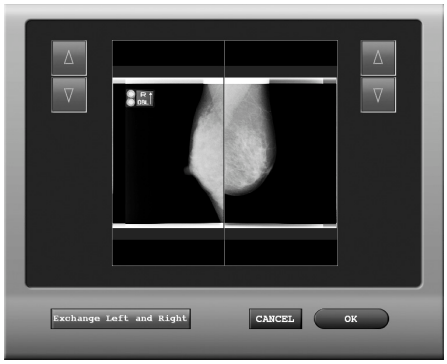
⚠ Mammo Use is not approved in the United States of America.

2 on 1 Image Confirm Screen (for mammo images)

On this screen, image layout for “2 on 1output” can be checked and modified.
Vertical position of the mammo images can be adjusted in this screen.



Press the [OK] button after the first image is OK for “2 on 1 Output”.



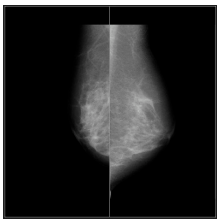


Image Position Check Field

Displays the layout of each image in 2 on 1 output.

Up/Down Arrow Buttons

Adjusts the vertical position of the image.
Pressing these buttons on the right will adjust the position of right image while those on the left will adjust the left image.

[Exchange upper and bottom] Button

Switch the positions of the image between the two.
Upper and bottom images switch their positions every time the button is pressed.

[CANCEL] Button

Cancels the 2 on 1 output.
・Returns to “Exam Check” screen.

[OK] Button

Execute the “1 on 2 Output” using the layout displayed in the “Image Position Check Field”.
・Returns to “Exam Check” screen.

Examination List Screen (When the examination list screen has been set as the initial screen)

The screen displays a list of patient data reserved for examination by CS-3 or ID-680 Series or Radiology Information System (RIS).
The patient data required for examination may be selected from the patient data list.

- **New patient data reserved.**
- **Patient data already reserved may be modified or deleted.**
- **Based on parameters (Hospital department, Location(Ward), Exam. Room) input into patient data, specific patient data can be extracted and list displayed.**

p.28 Before Examination

List Display of Patient Data

Reserved patient data and exposure parameters and count added to patient data are displayed.
Patient data used for examination may be selected here.
Touching any line of patient data will result in selection of that data and display of the data in a green frame in blue characters.
Patient data for which examination has been restarted and suspended on the examination check screen is displayed as " * "

- **8 reserved patient data are displayed on one screen. Where there are more than 9 reserved data, the scroll button may be used to scroll down the list.**
- **Touching the title of an item of patient data allows that item name to be used as a key for patient data sorting. One touch results in display in ascending order, one more touch in descending order.**
- **The suspended patient data is displayed in a purple color.**

In cases of patients for whom there is input in patient data items displayed in yellow (selection of data "Possibility" or "Pregnancy" under "pregnancy"), an exclamation mark (!) is displayed in the left corner of the patient data list and on the patient data amendment screen.

or

Filter, Schedule, Pending Display

Display of parameters extracted from the patient data list, reservation count and count of examinations in hold status.

Scroll Button [△ · ▽]
Scrolls the list one patient data at a time.

Scroll Button [⏫ · ⏬]
Scrolls the list 8 patient data at a time.

[KONICAMINOLTA] Button
Used to display the system menu screen.
If an error occurs on the CS-3 or any other devices connected to the CS-3 such as input/output devices, the [REGIUS] button is displayed in red color.

p.128 System Menu Screen

Color of the [KONICA MINOLTA] button.
Black : Normal
Red : Error occurred

[New/Search] Button
Used to input new patient data which is then added to the reservation list

- **The patient data input search screen is displayed.**

p.92 Patient Data Input/Search Screen (When the examination list screen has been set as the initial screen)

[Modify] Button
Enables modification to the current selected patient data.

- **The examination search screen is displayed.**

[Delete] Button
Deletes the current selected patient data from the reservation list.

[Filter] Button
Used to set parameters for extraction of data from the reservation list.

- **The extraction parameter screen is displayed.**

p.96 Extraction Parameter Screen

[Refresh] Button
Updates the patient data list based on receipt of the latest data input from ID-680 Series or Radiology Information System (RIS).

[Perform] Button
Exposure/reading is initiated using patient data selected from the reservation list.

- **When exposure parameters have already been set, the examination check screen is displayed.**
- **When exposure parameters have not yet been set, the exposure parameter selection screen is displayed.**

p.81,85 Examination Check Screen [Single-Image Screen] [Multiple-Image Screen]

p.98 Body Part/ Parameter Selection Screen

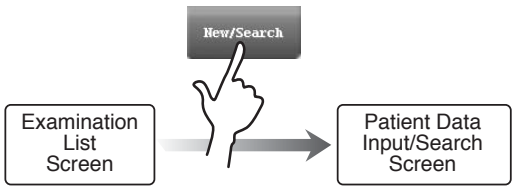
It is not possible to start the same examination on several CS-3s at the same time.

- **On the system where the same examination list is displayed on several CS-3s interfaced to the network, attempting to start study of an order that has been already in process on the other CS-3 will cause a message "This order is being examined in other CS-3. Please suspend the study". When such message is displayed, suspend the study for a while, and restart the study after suspending the study being implemented on the other CS-3.**

Patient Data Input/Search Screen

(When the examination list screen has been set as the initial screen)

New patient data may be input. Alternatively, patient data registered in the data base may be searched for input.



p.28 Before Examination

p.31 Patient Data Input (Input from CS-3)
p.32 Patient Data Input (Search from Data Base)

In cases of patients for whom there is input in patient data items displayed in yellow (selection of data "Possibility" or "Pregnancy" under "pregnancy"), an exclamation mark (!) is displayed in the left corner of the patient data list and on the patient data amendment screen.

or

Patient Data Input

For new registration, fill in each column.
To input data into an item, touch the column to the right of the desired item.
For search, input some of the characters of the data to be searched.
For search purposes, only patient ID and name in English may be input (2 items).
The examination is initiated when the [Search] button is touched or when the cursor is moved to another item.

When input is made in several items, search is made so that the result contains all inputs.

Scroll Button [△・▽]

Used to scroll the patient data page.
The current page number is shown on the button.

Setting can be made so that a new patient ID is automatically assigned when a new screen is opened for input.

[Search] Button

Used to search patient data.
This button is displayed only with basic system or the search-type system.

- **The search result screen is displayed.**

p.32 Patient Data Input (Search from Data Base)
p.94 Search Result Screen

In systems where data is retrieved from a higher device, the [search] button display changes from "search" to "cancel" during retrieval of patient data from the higher device.
Touching the [cancel] button will terminate the search for patient data in the higher device.

Input Panel (Touch panel)
This panel is for input of patient data.
Display changes depending on which item is selected from the patient data display.

- **For items requiring character or numerical input, data will be displayed in a format matching the item (alphabetical/numerical).**
- **For items where the selected branch is set, a branch selection button is displayed.**

p.25 Using the Input Panel

[Clear] Button
All items of the patient data displayed are deleted.

[CANCEL] Button
Cancels the patient data input mode.

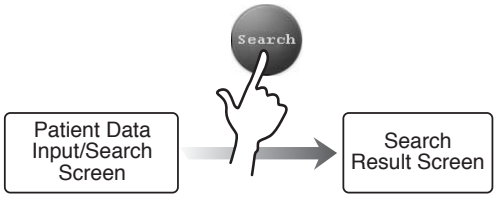
- **Display returns to the examination list screen.**

[OK] Button
The input patient data is added to the reservation list.

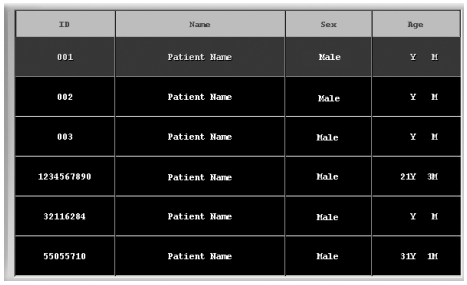
- **Display returns to the examination list screen.**
- **The input patient data is added to the examination list.**

Search Result Screen

A list of patient data searched is displayed.
Patient data selected on this screen can be input into the patient data input/search screen.



p.32 **Patient Data Input (Search from Data Base)**



Search Result List Display
The patient ID, name, sex and age from the patient data searched are displayed.
The patient data touched will be displayed in blue.

Scroll Button [△ · ▽]
Scrolls the patient data display page.

[CANCEL] Button
Cancels the patient data selected and closes the search result screen.

[OK] Button
The selected patient data is input into the patient data input/search screen and the search result screen closed.

- **The selected patient data is displayed in the patient data input/search screen.**

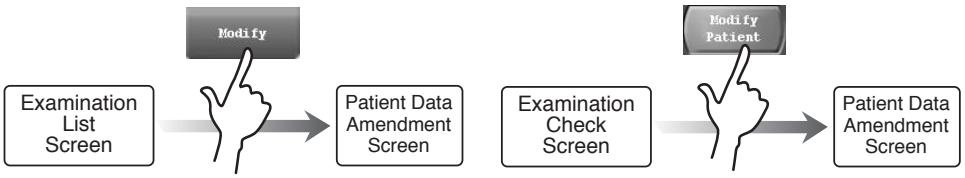
Patient Data Amendment Screen

This screen allows amendment to patient data selected from the examination list screen.

- **Patient data selected from the examination list screen is displayed in the patient data input window.**

Alternatively, allows modification to patient data currently being examined on the examination check screen.

- **The patient data currently being examined on the examination check screen is displayed.**



p.28 **Before Examination**

p.31 **Patient Data Input (Input from CS-3)**
p.32 **Patient Data Input (Search from Data Base)**

Patient Data Display

All items of the patient data either selected from the examination list screen or from the patient data shown to be currently under examination on the examination check screen are displayed.
To modify the patient data, touch the input window to the right of the desired item.

In cases of patients for whom there is input in patient data items displayed in yellow (selection of data "Possibility" or "Pregnancy" under "pregnancy"), an exclamation mark (!) is displayed in the left corner of the patient data list and on the patient data amendment screen.

or

Scroll Button [△・▽]

Used to scroll the patient data page.
The current page number is shown on the button.

Input Panel (Touch panel)

This panel is for modification of patient data. Display changes depending on which item is selected from the patient data display.

- **For items requiring character or numerical input, the keyboard will be displayed. (alphabetical/numerical).**
- **For items where the selected branch is set, a branch selection button is displayed.**

p.25 **Using the Input Panel**

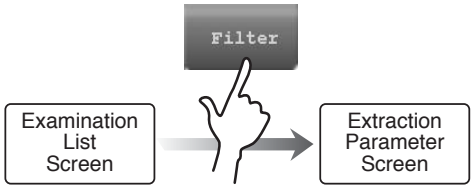
[CANCEL] Button
Cancels the patient data adjustment mode.
- **Display returns to the examination list screen.**

[OK] Button
Patient data is modified.
- **Display returns to the examination list screen.**

Extraction Parameter Screen

Parameters may be selected for extraction of patient data from the examination list screen."Hospital Department", "Location(Ward)" or "Exam. Room" may be used as parameters for extraction.

- **If more than one of the parameters for extraction "Hospital Department" "Location(Ward)" or "Exam. Room" are set, patient data matching all the set parameters will be extracted.**



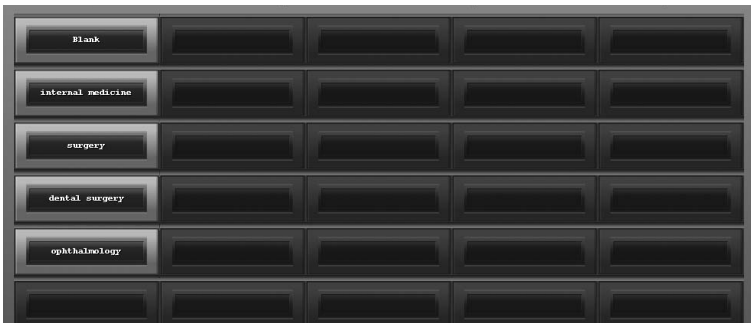
user tool

Allows input of new extraction parameters using CS-3.

[Hospital Department] Button
Used to select "hospital department" parameters.

[Location(Ward)] Button
Used to select "location(ward)" parameters.

[Exam. Room] Button
Used to select "exam. room" parameters.



Parameter Selection Button Display
The button format shows the extraction parameters. Touch the extraction category button required ("Hospital department", "Location(Ward)" or "Exam. Room") and effect selection by touching the parameter selection button displayed on screen.

- **Multiple parameters may be selected for each of the categories ([Hospital department], [Location(Ward)] or [Exam. Room])**
- **The selected button will be displayed in a dark colour.**

Scroll Button [◁◁ · ▷▷]
Where there are 40 or more parameter selection buttons, the scroll button may be used.

[Clear] Button
Extraction parameters are cleared.

- **All categories ([Hospital department], [Location(Ward)] or [Exam. Room]) are cleared.**

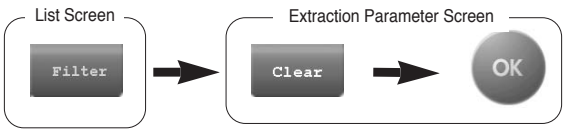
[CANCEL] Button
Extraction parameter settings/changes are cancelled.

- **Display returns to the examination list screen.**

[OK] Button
Sets extraction parameters.

- **Display returns to the examination list screen.**
- **The examination list screen is modified to match the set extraction parameters.**

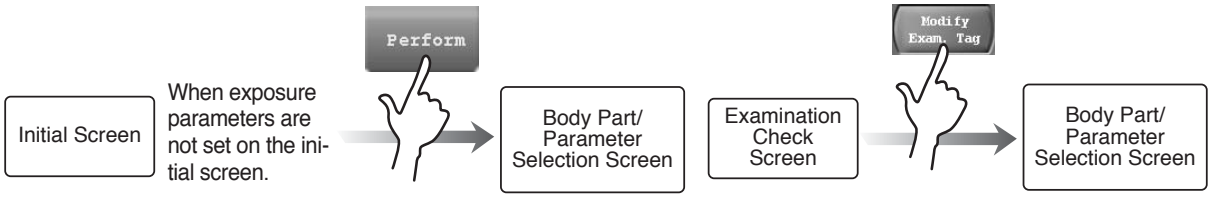
To return to the list prior to extraction:
Touch the [Filter] button again to display the extraction parameter screen and touch the [Clear] and [OK] buttons in sequence.



Body Part/Parameter Selection Screen

To initialize examination when the body part/parameters are not set, reader type and body part should be selected and parameters registered in the order.

- **When body part/parameters are selected, it is possible to move from this screen to the examination check screen.**
- **Patient data may be set in the order and added to the reservation list.**
- **Body part/parameters for the patient shown as currently under examination on the examination check screen may be added or amended.**


Initial Screen
When exposure parameters are not set on the initial screen.
Perform
Body Part/ Parameter Selection Screen
Examination Check Screen
Modify Exam. Tag
Body Part/ Parameter Selection Screen

user tool

Sort, addition, edit and deletion of the body part/parameter may be carried out with the user tool.

Reader Selection Display
Displayed when multiple readers are connected.
The exposure parameter buttons displayed will differ depending on the reader selected here.

[My Favorite] Button
Displays body parts, body part sets set by the user in advance.

[Upright] Button
Selected when the upright reader is to be used.

[C-Reader] Button
Selected when the cassette reader is to be used.

General Category Button
The body part for examination may be selected using the buttons displayed.
Body part/parameter buttons will differ depending on the body part selected here.

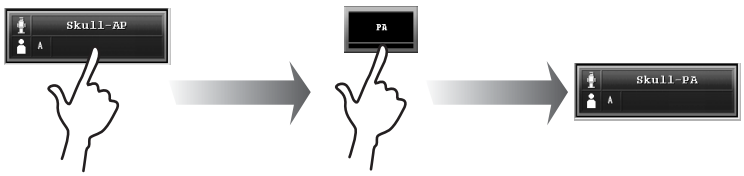
Parameter Button
The examination target set by selection using the body part buttons and parameters for each examination target are displayed in button format.
Selection of one parameter button for the examination required will result in addition of a new order to the order list.

Scroll Buttons [◁◁ · ▷▷]
Used to scroll the parameter button display when there are 6 or more parameter buttons in the general category.

Order List Display
A list of parameters registered in the order is displayed.
Touching a parameter button will result in registration of that condition in the order and display on the order list.

Exposure parameters may be registered in one patient data up to a maximum of 32 orders.

To change parameters registered in an order



Touch the order to be changed on the order list. (The order will be displayed in a green frame.)

Select the new parameter button to be set.

Completion of change.

Scroll Buttons [△ · ▽]
Used to scroll the order list 8 orders at a time when 9 or more orders are registered.

[Delete] Button
Used to delete an order where parameters have already been registered.

To delete parameters registered in an order

Touch the order to be deleted on the order list.
(The order will be displayed in a green frame.)

Touch the [Delete] button.

Once the order is exposed and completed on the Examination Check Screen, it cannot be deleted.
However, when it is not output yet, it can be deleted by abolishing the image using [NG] button.

[Schedule] button
Used to set an order where parameters are registered in patient data.

- **Pressing this button just results in setting the parameter in the patient data, the examination itself will not be carried out.**
- **The display returns to the initial screen (examination search or examination list screen).**

Returning to the initial screen using the [Schedule] button will result in automatic setting of the examination time and date for supplementary exposure data.

[CANCEL] Button
Cancels the parameter setting mode.

- **The display returns to the examination list screen.**

p.81, 85 Examination Check Screen [Single-Image Screen] [Multiple-Image Screen]

[OK] Button
Used to register the selected parameter in the order and initialize examination.

- **The display returns to the examination check screen.**

When exposure parameters are selected in transition from the initial screen, the parameters selected from the exposed part/parameter selection screen may be re-aligned as follows on the examination search screen: upright parameter->recumbent parameter->cassette parameter.

Detailed Data Setting Screen (Acquisition)

Changes reading parameters of the reader.

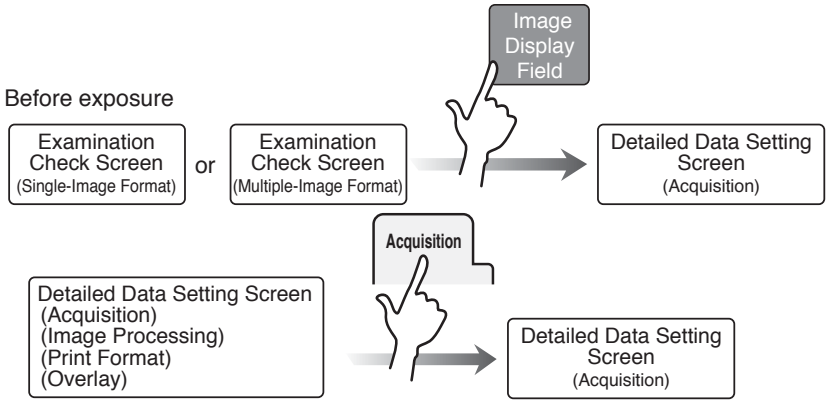


Image Display Field
Before exposure
Examination Check Screen (Single-Image Format)
or
Examination Check Screen (Multiple-Image Format)
Detailed Data Setting Screen (Acquisition)
Acquisition
Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)
Detailed Data Setting Screen (Acquisition)

Items for detailed data setting may be selected by touching the tab at the top right of the screen.

The items "Size", "Direction" and "Area" are determined by the cassette inserted and need not be selected as REGIUS MODEL 170/190 parameters.

Image Display Field

< Prior to exposure >

A grey rectangular read field is displayed according to size, direction and area that is set using the exposure parameter buttons. Current set exposure parameters are displayed in green characters.

< After exposure >

The exposed image is displayed.

[Additional Information] Button

Used to input supplementary information relating to examination or image data.

- **The additional information screen is displayed.**

p.126 Additional Information Screen

Tab for Selection of Setting Items

Used to select items to be set on the detailed data setting screen.

Touching the tab will result in display of the setting screen for that item.

p.101, 103, 111, 118 Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)

⚠ Mammo Use is not approved in the United States of America.

[Resolution] Button
Enables selection of the read resolution. Usually, "Standard" (175μm) or "High" (87.5μm) is selected. However, when editing the mammo exam tag keys,these buttons will be replaced by "Standard" (87.5μm) or "High" (43.75μm).

[Size] Button
Used to select the size for the image to be read.
- **This selection cannot be made if the cassette reader is used.**

[Direction] Button
Used to select the read direction. [Portrait] or [Landscape] may be selected.
- **When a read size of 14" X 14" or 17" X 17" has been selected, "Landscape" may not be set.**
- **These selections are not available when the cassette reader is used.**

[Area] Button
Used to select the vertical read position. [Upper], [Middle] or [Lower] may be selected.
- **When a read size of 14" X 17" or 17" X 17" has been selected, [Middle] or [Lower] may not be set.**
- **These selections are not available when the cassette reader is used.**

[CANCEL] Button
Cancels the exposure parameter selection mode.
- **Display returns to the examination check screen.**

p.81, 85 Examination Check Screen [Single-Image Screen] [Multiple-Image Screen]

[OK] Button
Sets the selected exposure parameters
- **Display returns to the examination check screen.**

Detailed Data Setting Screen (Image Processing)

Allows amendments to image parameters to match the image read.

- **Amendments to image processing parameters S and G values as well as ROI adjustments can be carried out only after image reading.**

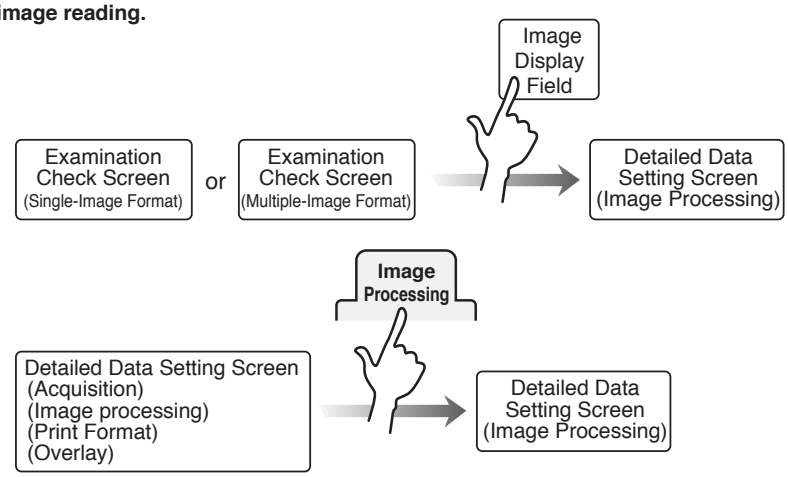
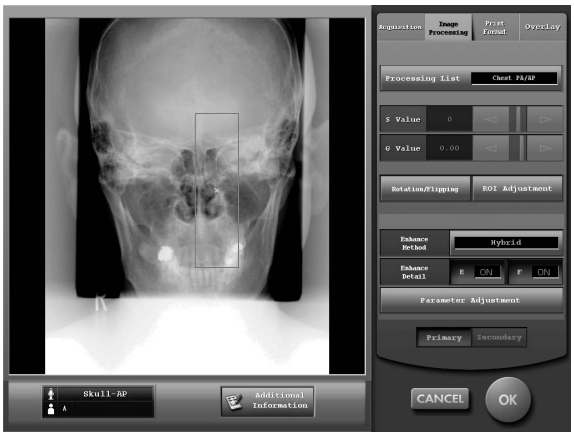


Image Display Field
Examination Check Screen (Single-Image Format)
or
Examination Check Screen (Multiple-Image Format)
Detailed Data Setting Screen (Image Processing)
Image Processing
Detailed Data Setting Screen (Acquisition) (Image processing) (Print Format) (Overlay)
Detailed Data Setting Screen (Image Processing)

Touching the tab at upper right enables selection of set items of detailed data.



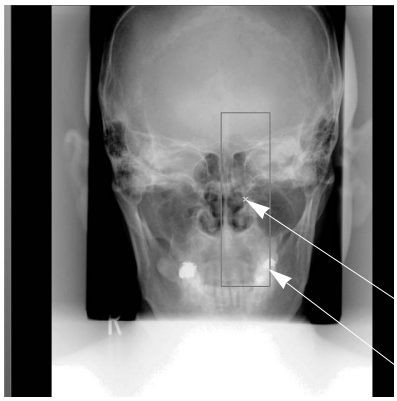


Image Display Field
The current ROI is overlaid in a rectangle on the image read.

center (Green)

ROI frame
(B&W line, reversal of background)

[Additional Information] Button
Used to input additional information relating to the image after exposure.

- **The additional information screen is displayed.**

p.126 Additional Information Screen

Tab for Selection of Setting Items
Used to select items to be set on the detailed data setting screen.
Touching the tab will result in display of the setting screen for that item.

p.101, 103, 111, 118 Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)

[Processing Algorithm] Button

Image processing parameters may be selected and set from the processing menu on which LUT, ROI, S and G values have been preset.

- **The processing menu selection screen is displayed.**
- **S and G value displays differ depending on the processing menu selected.**

p.105 Processing Menu Selection Screen

[S Value] Button

The S value for the image may be adjusted either by clicking on the
[◁] / [▷] buttons or moving the scroll bar left or right.

- **Changes to the S value will change the image read in the image display field.**

[G Value] Button

The G value for the image may be adjusted either by clicking on the
[◁] / [▷] buttons or moving the scroll bar left or right.

- **Changes to the G value will change the image read in the image display field.**
- **Changes to the G value will produce automatic changes to the S value.**
- **Adjustments are possible only after image reading.**

p.107 Rotation/Flipping Selection Screen

[Rotation/Flipping] Button

Used for rotation and reversal of the image.

- **The Rotation/Flipping Selection screen is displayed.**
- **Adjustments are possible only after image reading.**

p.106 ROI Adjustment Screen

[ROI Adjustment] Button

Used to adjust the ROI range to match image.

- **The ROI adjustment screen is displayed.**
- **Adjustments are possible only after image reading.**

ROI will be automatically set for the stitched images. Manual adjustment is not possible.

[Enhance Method] Button

Used to select the method of image enhancement.
"Standard" or "Hybrid" may be selected.

[Enhance Detail] Button

Selection of enhancement of the image using E-processing (equalization) and F processing (frequency).
Each time the button is touched, the setting changes (ON ⟷ OFF).

[Processing Parameter [Detail]] Button

Used to adjust E and F-processing parameters.

- **The parameter adjustment screen is displayed.**
- **The items available for adjustment differ depending on the [Enhancement Mode] selection.**

p.108 Parameter Adjustment Screen

[Primary/Secondary] Button

Used to specify primary/secondary-images when the image is output in the 1 on 1 output mode.

- **The [Secondary] button may be selected only when the print format is set to [AA] or [A/A].**

p.111 Detailed Data Setting Screen (Print Format)

[CANCEL] Button

Cancels the image processing parameter selection mode.

- **Display returns to the examination check screen.**

p.81, 85 Examination Check Screen [Single-Image Screen] [Multiple-Image Screen]

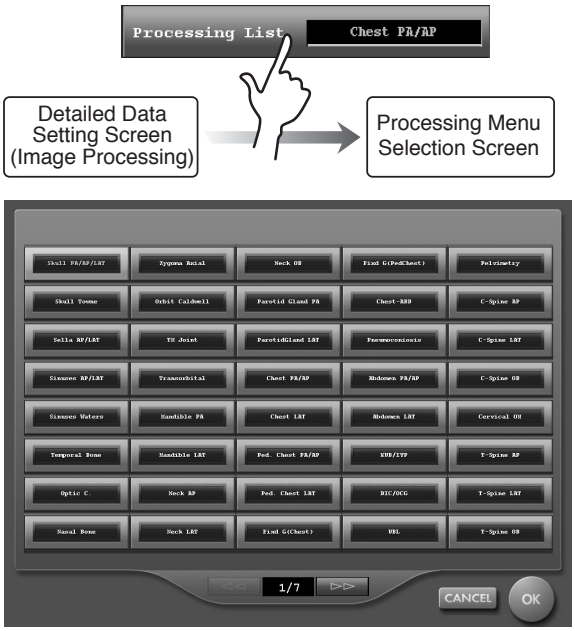
[OK] Button

Sets the selected image processing parameters

- **Display returns to the examination check screen.**

Processing Menu Selection Screen

Selection of the processing menu in which ideal body part/examination content has been registered in advance enables determination of processing parameters suited to the image.



user tool

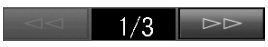
Addition, edit and deletion of the processing menu may be carried out with the user tool.

Selection of a processing menu already selected before display of the processing menu selection screen will invalidate changes made prior to display of the selection screen. To return to the detailed data setting screen without invalidating changes, touch the [CANCEL] button.

Processing Menu Display

Names of the menus incorporated into CS-3 are displayed in button format.

Touching a menu name will produce display of image processing parameters (LUT, S, G-values, ROI) registered in that menu.



Scroll Buttons [◁◁ · ▷▷]

Enables page scrolling of the displayed processing menu.

The current page number and the total page count are displayed between buttons.

[CANCEL] Button

Cancels the processing menu selection mode.

- **Display returns to the detailed data setting screen (image processing).**

[OK] Button

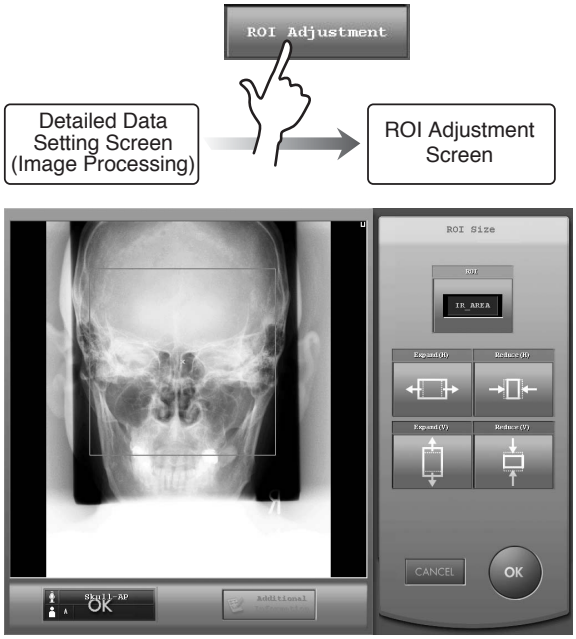
Sets the selected processing menu.

- **Display returns to the detailed data setting screen (image processing).**

p.103 **Detailed Data Setting Screen (Image Processing)**

ROI Adjustment Screen

Allows adjustment of the ROI range to match the image.



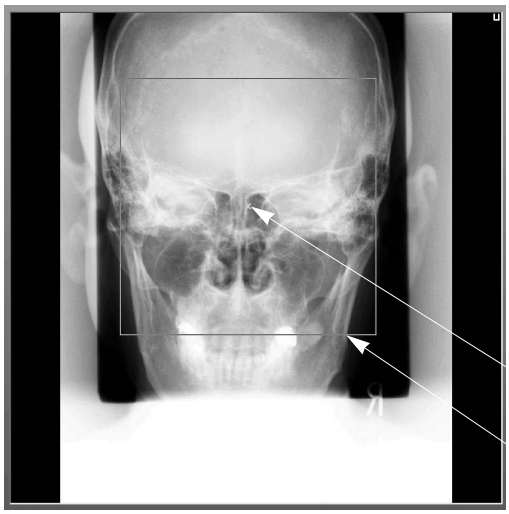
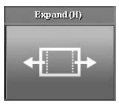


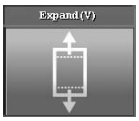
Image Display Field
The current ROI is displayed in a rectangle overlaying the image read. Clicking on the image will result in shifting of the ROI rectangle with the point touched set as its center.

[ROI] Button
When a body part is used for image processing with two fields (ROI1 and ROI2), this button is used to switch between the two ROI fields.
Each time the button is touched, the display switches between the two ROI fields.

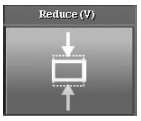


[Expand(H)] Button
Widens the ROI width.

[Reduce(H)] Button
Narrows the ROI width.



[Expand(V)] Button
Increases the ROI height.



[Reduce(V)] Button
Decreases the ROI height.

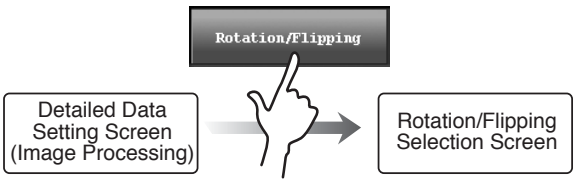
[CANCEL] Button
Cancels the ROI adjustment mode.
- **Display returns to the detailed data setting screen (image processing).**

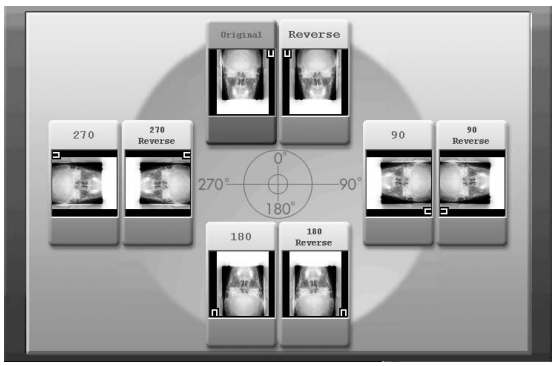
p.103 Detailed Data Setting Screen (Image Processing)

[OK] Button
Sets the adjusted range in the ROI.
- **Display returns to the detailed data setting screen (image processing).**

Rotation/Flipping Selection Screen

Enables setting of direction and angle for image rotation/flipping.





Rotation/Flipping List Display
A list of images showing the original rotated 0°, 90°, 180° and 270° and left/right reversal are displayed in button format.
Touch the button matching the required direction/angle.
- **Display returns to the detailed data setting screen (image processing).**
- **The image display field shows the image adjusted to match the selected rotation/flipping direction and angle.**

p.103 Detailed Data Setting Screen (Image Processing)

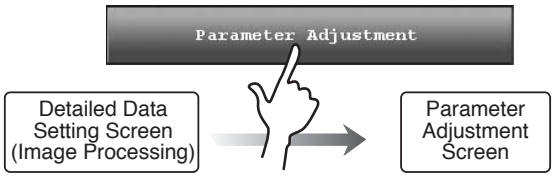
Please note the limitation for the stitched images (composite image).

Available : “Original”, “Flip”, “180º Rotate”, “180º Rotate+Flip”
Not Available : “90º Rotate”, “90º Rotate+Flip”, “270º Rotate”, “270º Rotate+Flip”

⚠ Mammo Use is not approved in the United States of America.

Parameter Adjustment Screen

Enables selection of the image enhancement mode and changes to E (equalization) and F (frequency) processing parameters.



Notes for EF processing of mammo images.
When the standard process is applied to the mammo image, artifacts caused by strong edge effect, which is attributed to the nature of the process, may be produced. In order to avoid such problem in the chest wall side, select the hybrid process for the mammo image.

Image Display Field
The image read is displayed.
Changes to enhancement processing parameters are reflected in the image displayed.

[Enhance Method] Button
Used to select the method of image enhancement.
[Standard] or [Hybrid] may be selected.

[Enhance Detail] Button
Selection of enhancement of the image using E-processing (equalization) and F processing (frequency). Each time the button is touched, the setting changes (ON <--> OFF).

E-processing

[Mask Size] Button
This button is displayed when [Standard] is selected as the enhancement mode setting.
The [◁]/[▷] scroll buttons may be clicked on to move the scroll bar left/right to set the mask size (pixel count) for E-processing operation.

[E-Preset] Button
This button is displayed when [Hybrid] is selected as the enhancement mode setting.
Enables selection of hybrid E-processing parameters incorporated into CS-3.
- **The enhancement type (E-processing) selection screen is displayed.**

p.110 Enhancement Type (E-processing) Selection Screen

[Low Density] Button
Click the [◁]/[▷] buttons or move the scroll bar left/right to change the low density enhancement coefficient.

[High Density] Button
Click the [◁]/[▷] buttons or move the scroll bar left/right to change the high density enhancement coefficient.

F-processing

[Mask Size] Button
This button is displayed when [Standard] is selected as the enhancement mode setting.
The [◁]/[▷] scroll buttons may be clicked on to move the scroll bar left/right to set the mask size (pixel count) for F-processing operation.

[E-Preset] Button
This button is displayed when [Hybrid] is selected as the enhancement mode setting.
Enables selection of hybrid F-processing parameters incorporated into CS-3.
- **The enhancement type (F-processing) selection screen is displayed.**

p.110 Enhancement Type (F-processing) Selection Screen

[Low Density] Button
Click the [◁]/[▷] buttons or move the scroll bar left/right to change the low density enhancement coefficient.

[High Density] Button
Click the [◁]/[▷] buttons or move the scroll bar left/right to change the high density enhancement coefficient.

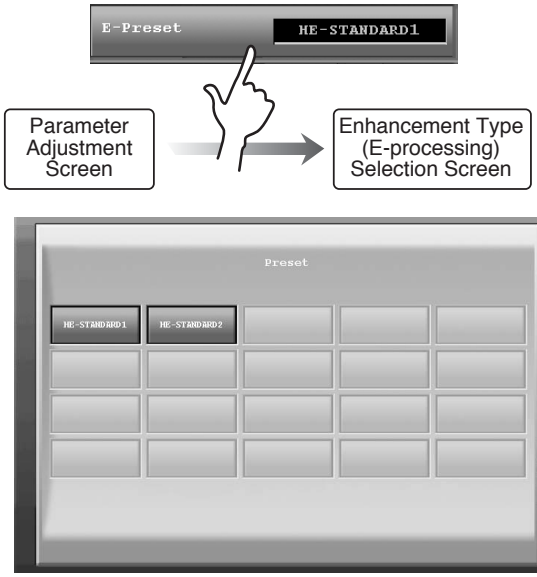
[CANCEL] Button
Cancels the image-processing parameter adjustment mode.
- **Display returns to the detailed data setting screen (image processing).**

p.103 Detailed Data Setting Screen (Image Processing)

[OK] Button
Sets the adjusted enhancement processing parameters.
- **Display returns to the detailed data setting screen (image processing).**

Enhancement Type (E-processing) Selection Screen

Enables selection of preset hybrid E-processing parameters.



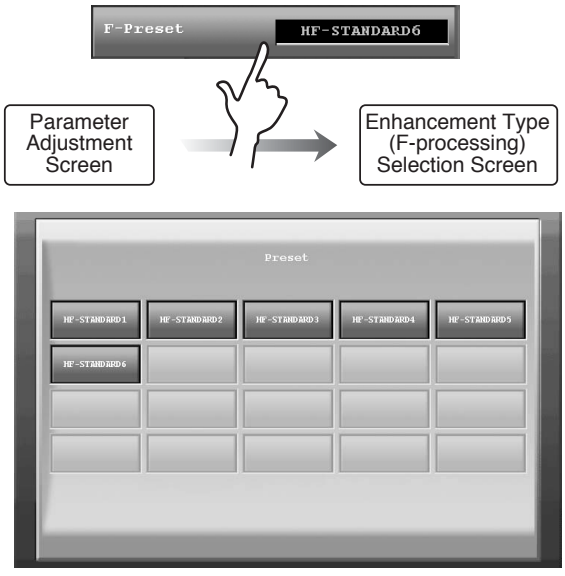
Enhancement Type Parameter List

A list of preset E-processing parameter names is displayed in button format.
Touch the parameter name button to select the desired parameter.

- **The enhancement type (E-processing) selection screen is closed.**

Enhancement Type (F-processing) Selection Screen

This screen is invoked by touching the [F-Preset] button on the parameter adjustment screen.
Enables selection of preset hybrid F-processing parameters.



Enhancement Type Parameter List

A list of preset F-processing parameter names is displayed in button format.
Touch the parameter name button to select the desired parameter.

- **The enhancement type (F-processing) selection screen is closed.**

⚠ Mammo Use is not approved in the United States of America.

Detailed Data Setting Screen (Print Format)

Enables setting of the format of the image output to the printer.

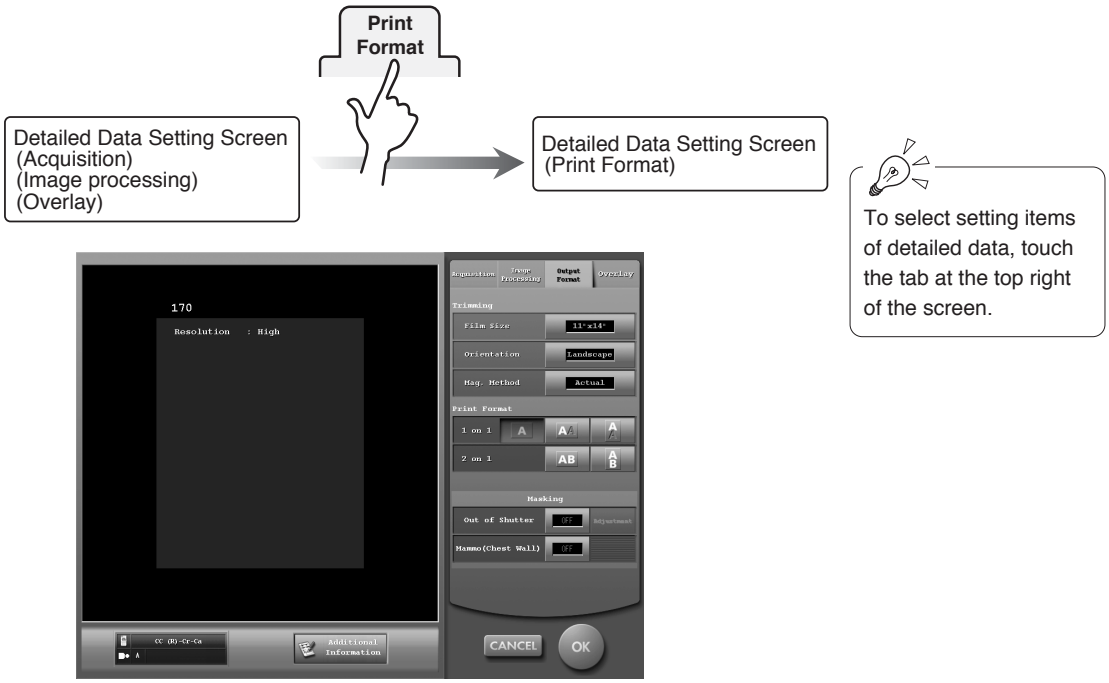


Image Display Field

<Prior to exposure>

The exposure parameters currently set are displayed.

<After exposure>

The field of the image output is shown in a green rectangle overlaid on the image read.

To move the output field, touch either one point on the screen or one of the four corner arrow indicators.

[Additional Information] Button

Used to input additional information relating to the image after exposure.

- **The additional information screen is displayed.**

Tab for Selection of Setting Items

Used to select items to be set on the detailed data setting screen.

Touching the tab will result in display of the setting screen for that item.

p.126 Additional Information Screen

p.101, 103, 111, 118 Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)

Trimming

[Film Size] Button

Enables selection of film size for image output.

- **The film size selection screen is displayed.**

[Orientation] Button

Enables selection of direction of the image output.
"Portrait" or "Landscape" may be selected.

- **Each time the button is touched, the setting changes. (Portrait <--> Landscape).**

[Mag. Method] Button

Enables selection of the method of image output.

- **Each time the button is touched, the setting changes (Full <--> Actual).**

  [Full]

  The image is output in expanded or reduced format to match the image-read size and the output image size.

  [Actual]

  The image is expanded/reduced and output at maximum film size.

  Note, however, that even if the film size is larger than the image size, the image output will be no larger than for the [Full] setting.

Print Format

Enables selection of the image output format.

[1 on 1] Button

[A] **The image is output in single-image format.**

[AA] **Two of the same image are output left/right-aligned.**

[A/A] **Two of the same image are output vertically-aligned.**

[2 on 1] Button

[AB] **Two different images are output left/right-aligned.**

[A/B] **Two different images are output vertically-aligned.**

⚠ Mammo Use is not approved in the United States of America.

Masking

[Out of Shutter] Button

Selects whether or not to mask the image.

- **The setting changes as follows each time the button is touched.**

[ON]	**The image is masked. When set to ON, the "ADJUST" button may be selected.**
[OFF]	**The image is not masked.**
[Adjustment]	**Adjusts the masking field. The masking adjustment screen is displayed.**

p.116 Masking Size Adjustment Screen

[Mammo (Chest Wall)] button

Selects whether or not to mask the chest wall side on mammogram images.

- **The setting changes as follows each time the button is touched.**

[ON]	**The chest wall side of the image is masked. When set to ON, the "ADJUST" button may be selected.**
[OFF]	**The chest wall side of the image is not masked.**

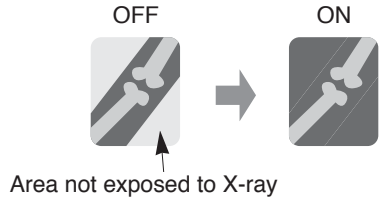
The [mammogram chest wall side] button used for masking may be utilized only when the mammogram parameter key has been selected.

Masking

The purpose of this type of image processing is to black out areas outside the field of X-ray exposure on the image read. This prevents undue light leakage when carrying out diagnosis of the printed film on the light table.

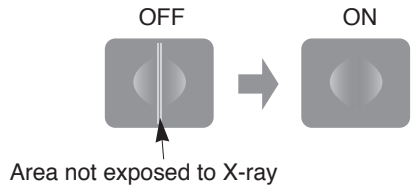
Out of Shutter

Any areas not exposed to X-ray when the image is taken are blacked out.



Mammo (Chest Wall)

Any areas on the chest wall side of a mammogram image are blacked out.



The result of irradiation field masking may be checked using the image display area on the examination check screen.

For accurate masking process ;
Following should be noted to enhance the accuracy in masking process.

1. The protector should be positioned as parallel as possible to the exposure field or in a place that does not interfere the edge of the exposure field.
2. Pay attention so that the object (clothes, other body parts, etc.) other than the body parts to be exposed should not be included within the exposure field.
3. Position the target body part as close as to the center of the exposure field.
4. When a split exposure is made, leave an unexposed area of 1cm or more between the exposure fields.

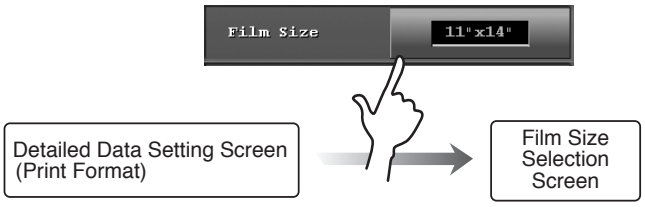
[CANCEL] Button
Cancels the print format setting mode.
- **Display returns to the examination check screen.**

[OK] Button
Sets the selected print format.
- **Display returns to the examination check screen.**

p.81,85
Examination Check Screen
[Single-Image Screen]
[Multiple-Image Screen]

Film Size Selection Screen

Enables selection of the film size.



Film Size List

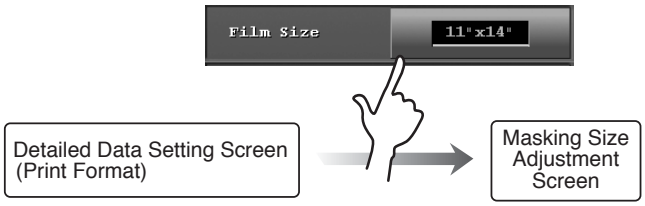
A list of film sizes available for output is displayed in button format.
To make a selection, touch the required size.

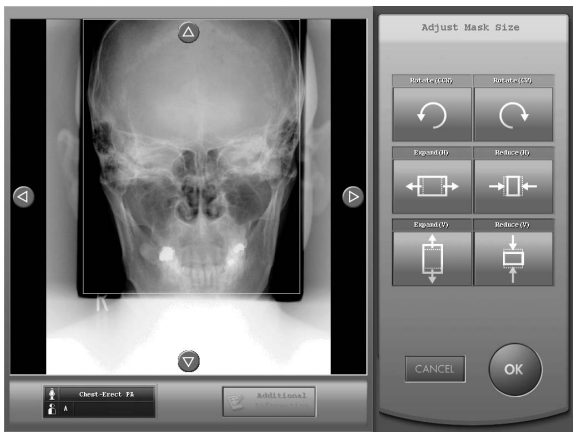
- **The film size selection screen will be closed.**

The sizes available for selection here are printer output film sizes. Thus only film sizes available on the printer used may be selected.

Masking Size Adjustment Screen

Allows adjustment of the masking size to match the image.





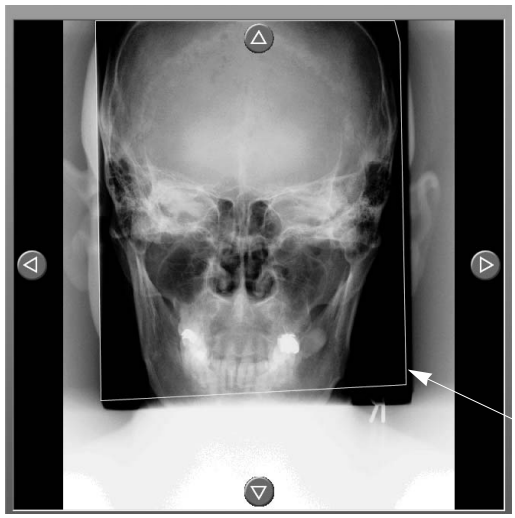
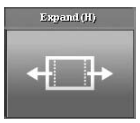


Image Display Field
The current masking frame is displayed in a rectangle overlaying the image read.
Touching ◁ on each side will move the masking frame.

Masking Size (yellow)

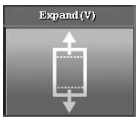
[Rotate (CCW)] Button
Rotate (CCW) the masking width.

[Rotate (CW)] Button
Rotate (CW) the masking width.

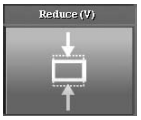


[Expand(H)] Button
Widens the masking width.

[Reduce(H)] Button
Narrows the masking width.



[Expand(V)] Button
Increases the masking height.



[Reduce(V)] Button
Decreases the masking height.

[CANCEL] Button
Cancels the masking adjustment mode.

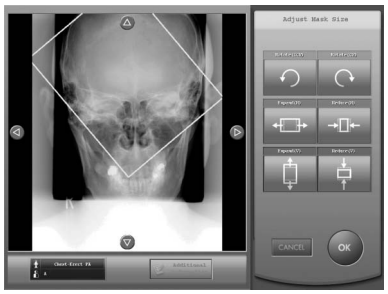
- **Display returns to the detailed data setting screen (print format).**

[OK] Button
Sets the adjusted range in the masking.

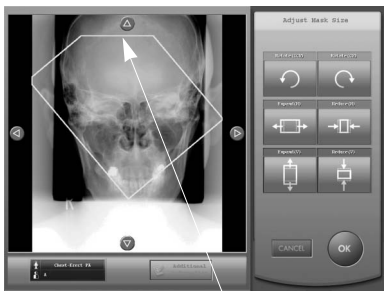
- **Display returns to the detailed data setting screen (print format).**

p.111 Detailed Data Setting Screen (Print Format)

Any segment of the masking frame extending beyond the top of the screen is cut. Touching the [OK] button with the off-screen segment of the masking frame remaining will produce a masking frame with the off-screen segment cut the next time the masking adjustment screen is displayed.



Touch the [OK] with the off-screen segment of the masking frame remaining.



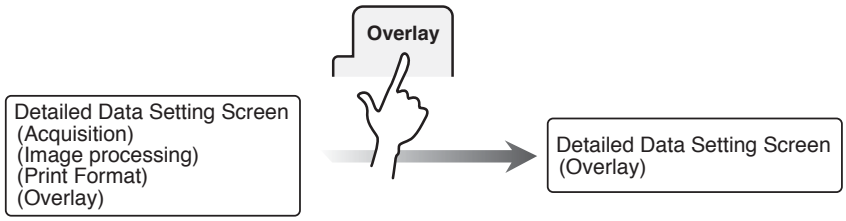
When the masking adjustment screen is next displayed, the off-screen segment of the masking frame is cut (on the screen at left, the masking frame is shown adjusted to exclude the off-screen segment for ease of confirmation).

Masking frame with off-screen segment cut

To return the masking frame to its initial status, return to the parameter key selection screen and re-select exposure parameters.

Detailed Data Setting Screen (Overlay)

Enables setting of data to be overlaid on the screen and output position of that data.



To select setting items of detailed data, touch the tab at the top right of the screen.

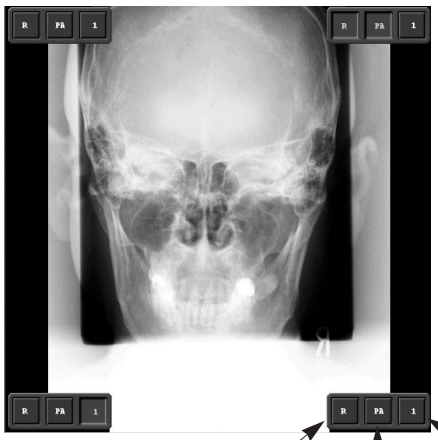


Image Display Field

< Prior to exposure >

Buttons to set the overlay position are displayed on the 4 corners of the image read.
Each overlay item will be output on the film where the button in green colour is displayed.
The overlay output position may be changed by touching the button for a different position.

< After exposure >

The button for setting of the overlay output position on the image read is displayed.
The procedure for changing the output position is identical to that described above (prior to exposure).

Overlays can be positioned as follows when the output is made with two frames for one image or two frames for two images.

Marker1,2 Marker 1 and 2 can be positioned for each frame. The position selected on the image area corresponds to the position on the frame.

Stamp Only one stamp per film (image data) can be positioned. The position selected on the image area is for whole area on the film (image data).

[Additional Information] Button

Used to input additional information relating to the image after exposure.

- **The additional information screen is displayed.**

p.126 Additional Information Screen

Tab for Selection of Setting Items

Used to select items to be set on the detailed data setting screen.
Touching the tab will result in display of the setting screen for that item.

p.101, 103, 111, 118 Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)

[Marker 1] Button

Enables selection of the marker 1 format.

- **The marker 1 selection screen is displayed.**

p.120 Marker 1 Selection Screen

[Marker 2] Button

Enables selection of the marker 2 format.

- **The marker 2 selection screen is displayed.**

p.120 Marker 2 Selection Screen

[Stamp] Button

Enables selection of the stamp format.

- **The stamp selection screen is displayed.**

p.121 Stamp Selection Screen

[Scale/Grid] Button

Enables selection of the format of the scale and grid overlaid on the image read-out.

- **The scale/grid selection screen is displayed.**
- **The selected scale/grid will be displayed overlaid on the image display field.**

p.122 Scale/Grid Selection Screen

[Grid/Scale] button is not available for composite images. However, “Scale” can be set enabled/disabled in the “Composite Image Adjustment” screen.

p.176 Composite Image Adjustment Screen

[Annotation] Button

Select the annotation to be overlapped with the output image.

- **“Annotation Setup” screen will be displayed.**
- **Selected annotation will be displayed on the image in the image display field.**

p.123 Annotation Setup Screen

[CANCEL] Button

Cancels the overlay setting mode.

- **Display returns to the examination check screen.**

[OK] Button

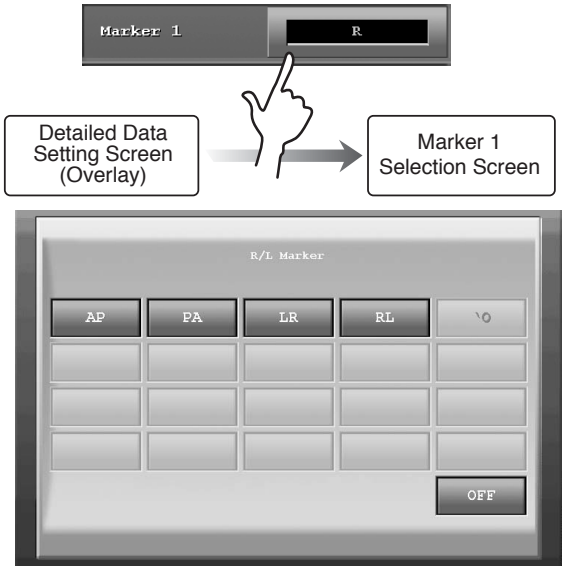
Sets the selected overlay.

- **Display returns to the examination check screen.**

p.81, 85 Examination Check Screen [Single-Image Screen] [Multiple-Image Screen]

Marker 1 Selection Screen

Allows selection of the marker to be output as marker 1.



The overlay output position may be located upper left, upper center, upper right, center left, center, center right, lower left, lower center, lower right.

user tool

Characters displayed in marker 1 are set using user tools.

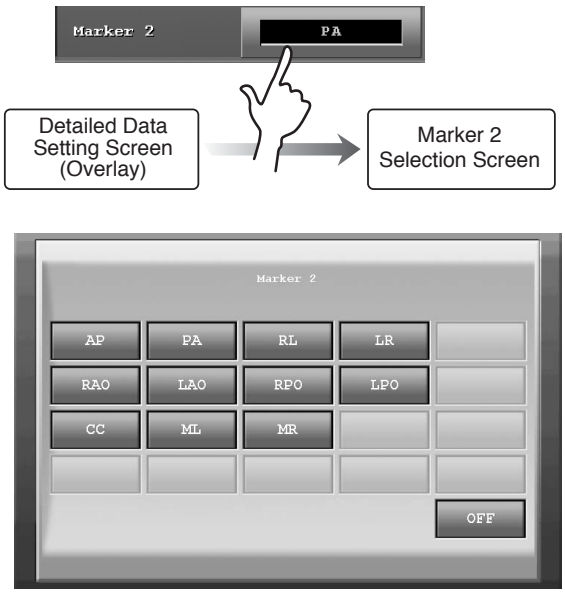
Marker 1 List

A list of markers available for output is displayed in button format.
Touch the required marker.

- **If the [OFF] button is selected, marker 1 will not be output.**
- **The marker 1 selection screen is closed.**

Marker 2 Selection Screen

Allows selection of the marker to be output as marker 2.



user tool

Characters displayed in marker 2 are set using user tools.

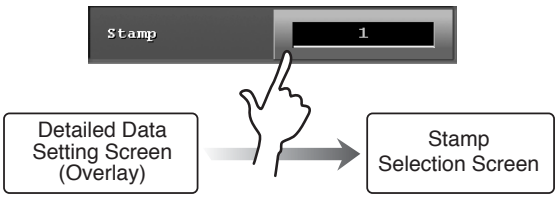
Marker 2 List

A list of markers available for output is displayed in button format.
Touch the required marker.

- **If the [OFF] button is selected, marker 2 will not be output.**
- **The marker 2 selection screen is closed.**

Stamp Selection Screen

Allows selection of the stamp, the format of which is pre-registered.



user tool

Items displayed in stamps are set using user tools.

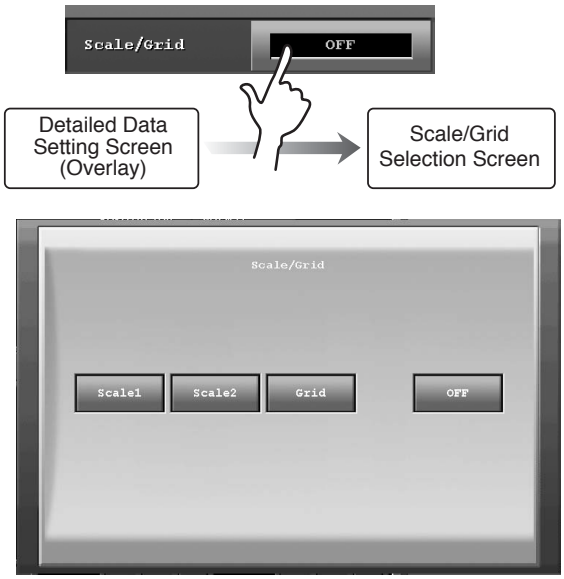
Stamp List

A list of stamp format numbers available for output is displayed in button format.
Touch the required stamp number.

- **If the [OFF] button is selected, the stamp will not be output.**
- **The stamp selection screen is closed.**

Scale/Grid Selection Screen

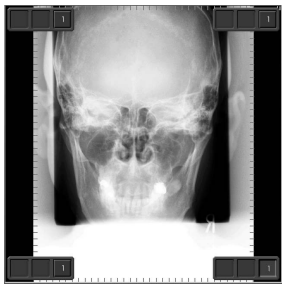
Enables selection of the scale or grid overlaid on the image.



Scale/Grid List

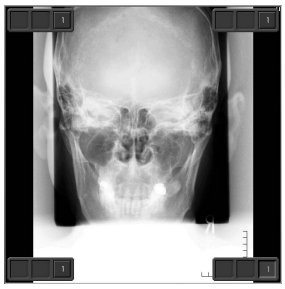
A list of scale and grid available for output is displayed in button format.
Touch the button corresponding to the required scale or grid.

- **If the [OFF] button is selected, the scale/grid will not be output.**
- **The scale/grid selection screen is closed.**



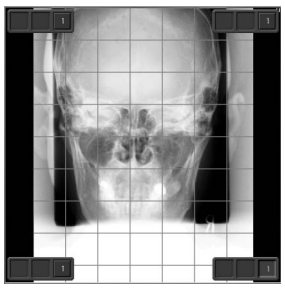
Scale 1

- A scale overlay is output around the image at 5mm intervals.



Scale 2

- A scale overlay is output at the right and lower center of the image at 5mm intervals.



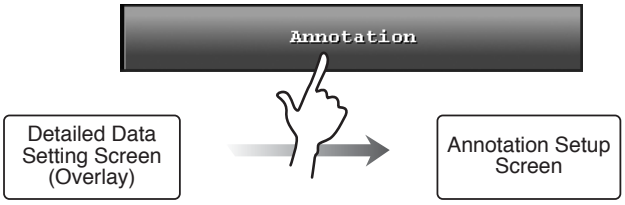
Grid

- A 50mm square grid overlay is overlaid on the image.

Annotation Setup Screen

Allocates and edits the annotation.

p.66 Allocating the Annotation



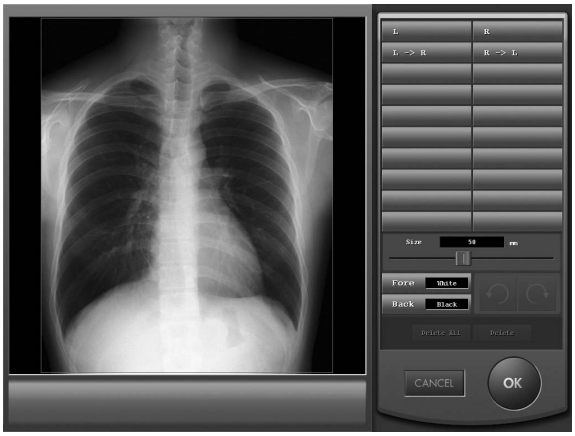


Image Display Field

Allocates the annotation.

Annotation can be allocated only on the imaging area including the area out of collimation. As in the example, a vertically long object shown on the left, annotation cannot be allocated in the areas at the both side where no image is scanned.

Preset Button

Register the text strings that should be allocated as an annotation. The text strings registered on each preset button will not be aborted even after completion of the examination or by power OFF.

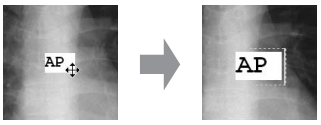
p.68 Registering the text string on the preset buttons

Font Size Slider

Changes the font size of the annotation.

- Drag to the left to decrease the font size.
- Drag to the right to increase the font size.

p.73 **Changing the font size of allocated annotation**



Ex) Changing the size from 20mm to 30mm

Annotation font size and output method (1 to 1/ whole image output)

When the whole image is output after allocating the annotation, the annotation fonts are reduced in proportion to the image so that the whole image fits to the output size. This results in output of annotation font size not identical to the “Font Size” set in the “Annotation” screen.

When a large image, especially a long body part is output to a smaller film by setting to “Whole Image” output, it may be necessary to set the annotation with a little larger font. Also to be noted is that even the output is made under the same font size and output method, output font size may be slightly different depending on the resolution (Normal/High Res).

[Fore] Button

Sets the color of the text used for the annotation.
Select from “White”, “Black”.

p.74 **Changing the color or background color of allocated annotation**

[Back] Button

Sets the color of the background of the text used for the annotation.
Select from “White”, “Black” and “Transparent”.

Text color and the background color are interlinked.

Setting the text in “White” allow selection of the background only from “Black” or “Transparent”.
Setting the text in “Black” allow selection of the background only from “White” or “Transparent”.

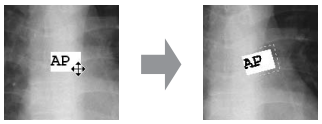
When the text of the annotation is selected, it changes the color to “Black” when the background is black, to “White” when the background is white, to “Blue” when the background is transparent.

[Rotate] Button

Rotates the allocated annotation. Rotates by 15° up to 360º every time it is pressed.

- Click the clockwise arrow to rotate the text string clockwise.
- Click the counterclockwise arrow to rotate the text string counterclockwise.

p.72 **Rotating the allocated annotation**



Ex) Rotated by 15˚ counterclockwise

The text strings of the rotated annotation cannot be changed. Text can be changed only after restoring the original status where the annotation is not rotated.

[Delete All] Button

Deletes all allocated annotations.

p.75 **Deleting all allocated annotations**

[Delete] Button

Deletes one annotation that has been selected.

p.75 **Deleting one of allocated annotations**

[CANCEL] Button

Cancels the annotation settings.

- **Returns to the "Detailed Data Setting" screen.**

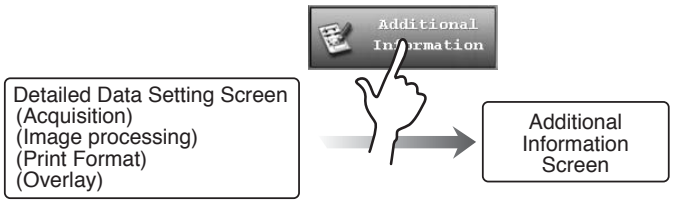
[OK] Button

Saves the annotation settings.

- **Returns to the "Detailed Data Setting" screen.**

Additional Information Screen

Enables input of additional data relating to examination images and X-ray exposure.



Additional Information Screen

Items of additional information are displayed.
To input data for an item, touch the input window to the right of each item.
A maximum of 52 patient data fields are available and these are divided on screen over multiple pages.

Scroll Buttons [△ · ▽]

Enables scrolling of additional information pages.
The current page number is displayed above the button.

Input Panel (Touch panel)

This panel allows input of additional information. Display changes depending on which item is selected on the additional information screen.

- **For items requiring character or numerical input, the keyboard will be displayed.**
- **For items where the selected branch is set, a branch selection button is displayed.**

p.25 Using the Input Panel

[CANCEL] Button

Cancels additional information setting mode.

- **Display returns to the detailed data setting screen.**

p.101, 103, 111, 118 Detailed Data Setting Screen (Acquisition) (Image Processing) (Print Format) (Overlay)

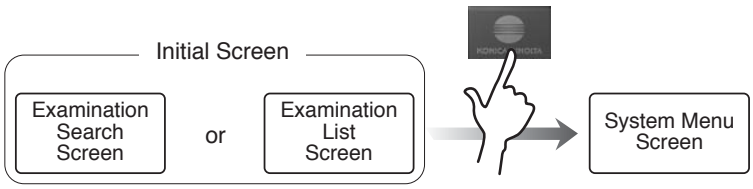
[OK] Button

Selected additional information is set.

- **Display returns to the detailed data setting screen.**

System Menu Screen

Enables checking of the status of devices connected to CS-3, examination history, selection of examining operator, setting of system operational data, etc.
Additionally, CS-3 system termination is carried out from this screen.



[Device Status] Button
Enables checking of output devices connected to CS-3 (reader device, host, printer, RIS) as well as the capacity used and remaining of the hard disk incorporated into CS-3.
- **The Device Status Screen is displayed.**

p.129 Device Status Screen

[Operator] Button
Enables selection of the operator name using CS-3.
- **The selection of operator screen is displayed.**

p.138 Operator Selection Screen

[History] Button
Enables referencing of images saved on the CS-3 hard disk from examinations already completed.
- **The examination history screen is displayed.**

p.139 Examination History Screen

[Utility] Button
Enables several settings of CS-3 system operational data.
Alternatively, this button is used to enter the user tool. It is controlled with the password to enter/exit the user tool.

p.28 Before Examination

[View Format] Button
Enables selection of the initial screen displayed upon start up of the CS-3 system.
- **Touching the button switches the view format.**

p.78 Examination Search Screen
(When the examination search screen has been set as the initial screen)
p.79 Examination List Screen
(When the examination search screen has been set as the initial screen)

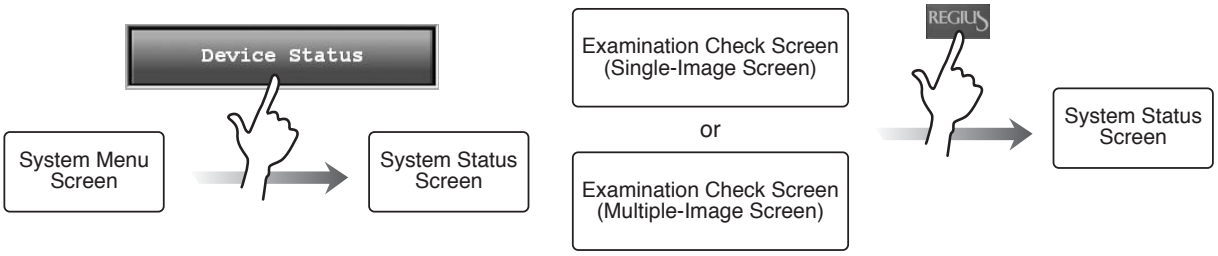
[Shutdown] Button
Enables termination of the CS-3 system and switching off of the power supply.
- **Touching this button produces display of a request for confirmation.**

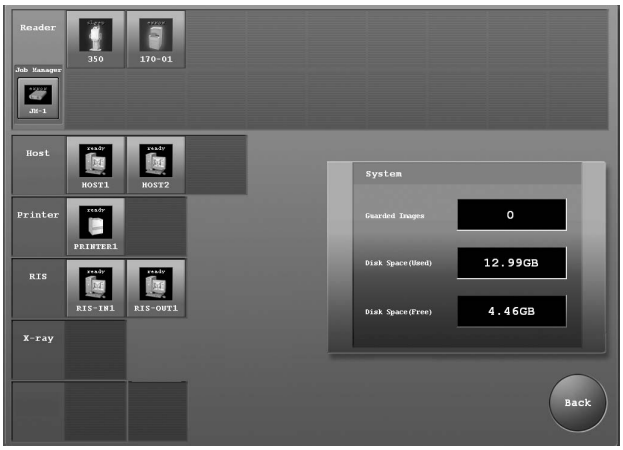
[Back] Button
Terminates the system menu screen.

p.24 Shut-Down (Power OFF)

Device Status Screen

Enables checking of devices connected to CS-3.





Reader (Upright<350>/Cassette<170>)

A list of reader devices connected to CS-3 is displayed in icon format.

The icon colour indicates the reader device status.

Black (normal)	: Ready for exposure.
Yellow (Initializing)	: Currently initializing
Green (busy)	: Currently reading image or erasing plate.
Blue (Sleep)	: In sleep mode.
Red (Error)	: Error has been occurred.

- **Touching an icon produces display of the status of the corresponding reader device.**

p.131 Reader Status Check Screen

JM

The JM connected to CS-3 is displayed in icon format.

The icon colour indicates the JM status.

Black (normal)	: Ready for operation.
Red (error)	: Error has occurred.

- **Touching the icon produces display of the JM status and the cassette registration status.**

p.132 JM Status Check Screen

JM

This is an application software that controls the network between REGIUS MODEL 170/190 and CS-3. (There are two types of JM; One is built-in, the other is external.) Contact your system administrator to ensure which of the two types is used.

Host

The host connected to CS-3 is displayed in icon format.
The icon colour indicates the host status.

Black (normal)	: Ready for operation.
Yellow (Initializing)	: Currently initializing
Green (busy)	: Currently outputting.
Red (error)	: Error has been occurred.

- **Touching an icon produces display of the status of the host as well as examination data reserved for output.**

p.134 Host Status Check Screen

Printer

A list of printers connected to CS-3 is displayed in icon format.
The icon colour indicates the reader device status.

Black (normal)	: Ready for operation.
Yellow (initializing)	: Currently initializing
Green (busy)	: Currently outputting.
Red (error)	: Error has been occurred.

- **Touching an icon produces display of the status of the printer as well as examination data reserved for output.**

p.135 Printer Status Check Screen

RIS

ID-680 Series devices connected to CS-3 are displayed in icon format.
ID-680 Series devices for input are displayed on the left, those for output on the right.
The icon colour indicates the ID-680 Series device status.

Black (normal)	: Ready for operation.
Yellow (initializing)	: Currently initializing
Green (busy)	: Currently busy.
Red (error)	: Error has been occurred.

- **Touching an icon produces display of the status of the ID-680 Series device as well as examination data reserved for output.**

p.136 RIS Status Check Screen

System

Displays the status of the hard disk incorporated into the CS-3 System.

Guarded Images	: Displays the number of images guarded on the examination history screen.
Disk Space (Used)	: Used disk capacity is shown in giga-bytes (GB).
Disk Space (Free)	: Remaining disk capacity is shown in giga-bytes (GB).

[Back] Button

Terminates the device status screen and returns to the system menu.

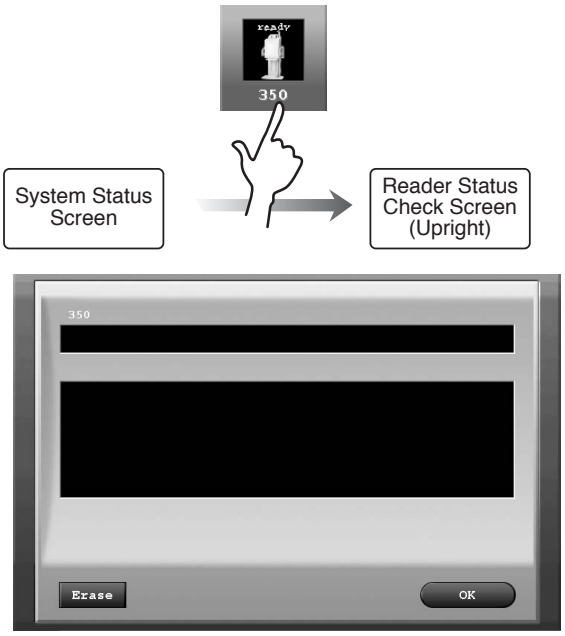
When disk capacity is full, images on the examination history screen are automatically erased from the oldest. A guard should be applied to selected examinations in the examination history screen to prevent erasing those images.

p.139 Examination History Screen

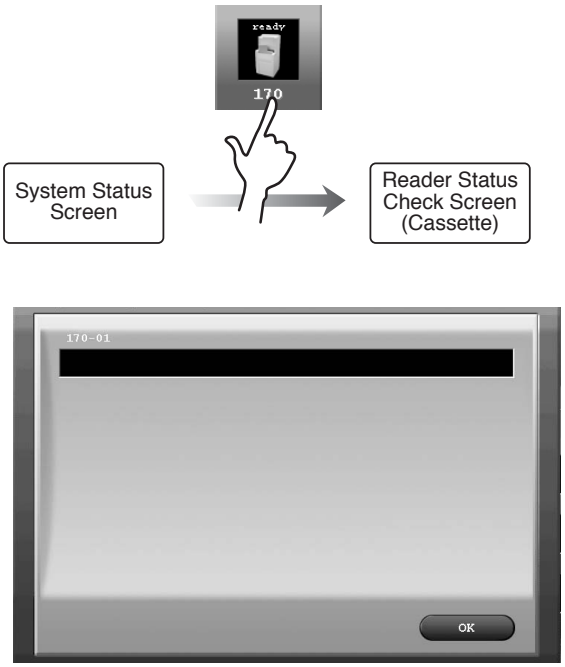
p.129 System Menu Screen

Reader Status Check Screen

Enables checking of the reader status.
Upright position and cassette reader status displays (2 types) are available.



Reader Status Check Screen (Upright position reader)
Display is invoked by touching the upright position reader icon on the device status screen.



Reader Status Check Screen (Cassette)
Display is invoked by touching the cassette reader icon on the device status screen.

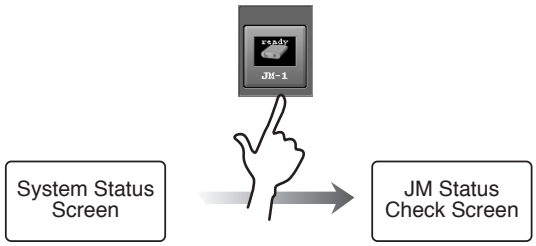
Error Message Display
In the event of a reader device error, an error message is displayed in red characters.
For details of errors and remedies, refer to the operation manual for each reader.

[Erase] Button (Upright position readers only)
Erases the reader plate.

[OK] Button
Terminates the reader status check screen.

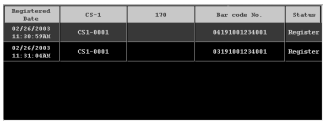
JM Status Check Screen

Enables checking of the JM status.



Error Message Display
In the event of a JM error, an error message is displayed in red characters.

p.152 **Trouble of JM**



REGIUS MODEL 170/190 Read Status Display

- **Bar Code Registration**

  Cassette reader read status list is displayed.
  Read status data registered by this CS-3 is displayed in green characters.
  Read status data registered by other CS-3 units is displayed in grey characters.
  The column showing selected read status data is displayed in blue.

  Time/date of registration
  : Displays the time/date the cassette was registered.

  CS-3 : Displays the name of the CS-3 that registered the cassette.

  170/190 : In cases where the cassette was inserted into a cassette reader, the name of the unit is displayed.

  Bar code No.
  : The bar code number of the registered cassette

  Status : "Registered" . Bar code registration completed.
  "Stand-by" . . REGIUS MODEL 170/190 in read stand-by status.
  "Reading" . . REGIUS MODEL 170/190 reading.

- **Screen Menu Selection**

  Only the "1st" exposure parameter is displayed in the REGIUS MODEL 170/190 read status display column.

[Standard] Button
Sets the device as the standard JM.

[Backup] Button
Sets the device as the backup JM.

Scroll Button [△ · ▽]
Scrolls pages on which bar code data for registered cassettes is displayed.

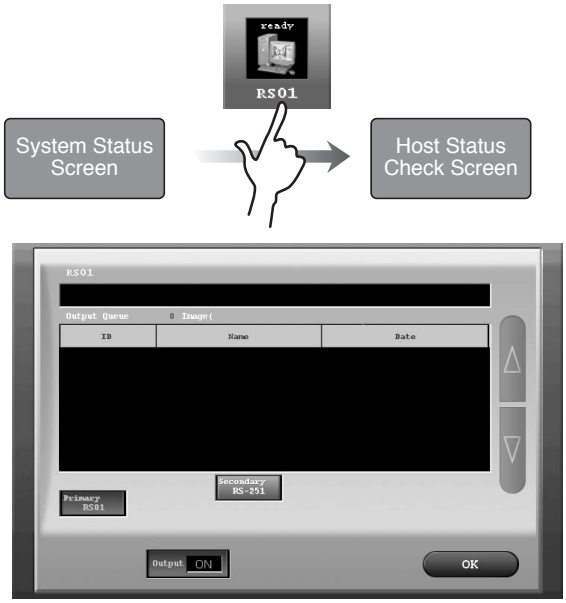
[Stop] Button
Deletes read status data selected from the read status data display.
Read status data may be deleted only from a registered CS-3.

[OK] Button
Terminates the JM status check screen.

Usually, the [Stop] button is not used.
The button is used in cases where the message "This image is scheduled for reading and cannot be referenced. The image may be referenced after completion of reading of after disabling the read operation" is displayed and movement to another screen is not possible.

Host Status Check Screen

Enables checking of the host status.



Error Message Display
In the event of a host error, an error message is displayed in red characters.
For details of errors and remedies, refer to the host operation manual.

Output Queue Display
A list of output reserved examination data for which examination has been completed is displayed.

[Primary] Button
Sets the device as the primary host.

[Secondary] Button
Changes the output destination from the primary host to the backup (secondary) host.

Attempts to change the output destination without a full understanding of usage of the system may result in multiple output of the same image to the host or render output to the image-diagnosis host impossible.
Attempts to change the output destination to a host already specified will produce display of the message shown at Right.

Scroll Button [△ · ▽]
Scrolls the output queue display.

[Output] Button
Turns output to the host ON/OFF.

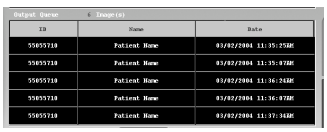
[OK] Button
Closes the host status check screen.

If the [OK] button is touched on the examination check screen with the [Output] button kept OFF, only the output queue will be stored without being output.

Printer Status Check Screen

Enables checking of the printer status.

Error Message Display
In the event of a printer error, an error message is displayed in red characters.
For details of errors and remedies, refer to the printer operation manual.



Output Queue Display
A list of output reserved examination data for which examination has been completed is displayed.

[Primary PRINTER1] Button
Sets the device as the primary printer.

[Secondary PRINTER2] [Secondary PRINTER3] Button
Changes the output destination from the primary printer to the backup (secondary) printer.

Scroll Button [△ · ▽]
Scrolls the output queue display.

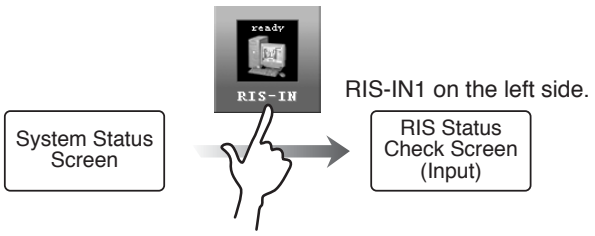
[Output] Button
Turns output to the printer ON/OFF.

[OK] Button
Terminates the printer status check screen.

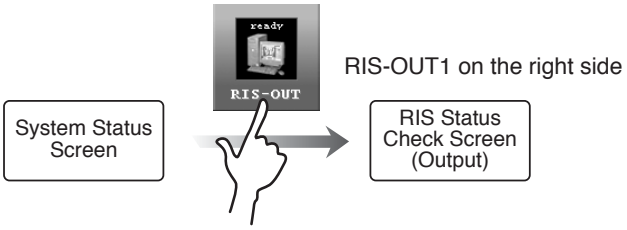
If the [OK] button is touched on the examination check screen with the [Output] button kept OFF, only the output queue will be stored without being output.

RIS Status Check Screen

Enables checking of the ID-680 Series status.



There are two types of ID-680 (for input and output) that is connected to the system as RIS.



Error Message Display
In the event of a ID-680 Series device error, an error message is displayed in red characters.
For details of errors and remedies, refer to the ID-680 Series device operation manual.

Unsent Study Display
A list of examination data for which examination has been completed but which has not yet been transmitted to the ID-680 Series is displayed.

Scroll Button [△ · ▽]
Scrolls the unsent study display.

[Primary] Button
Sets the selected device as the primary ID-680 Series device.

[Secondary] Button
Changes to the backup (secondary) ID-680 Series.

[Output] Button
Turns output to the RIS-OUT ON/OFF.

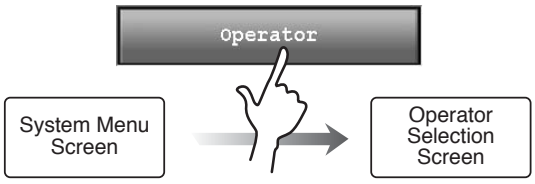
[OK] Button
Terminates the RIS-IN status check screen.

The unsent study display is displayed only in the RIS-OUT screen.

Setting the [OUTPUT] button to "OFF" may result in completed examination results remaining on the list without being output to the ID-680 Series unit. This button should not be set to "OFF" unless there is a fault with the ID-680 Series unit.

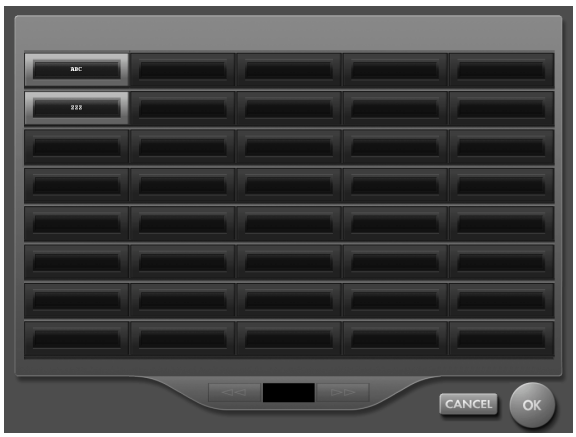
Operator Selection Screen

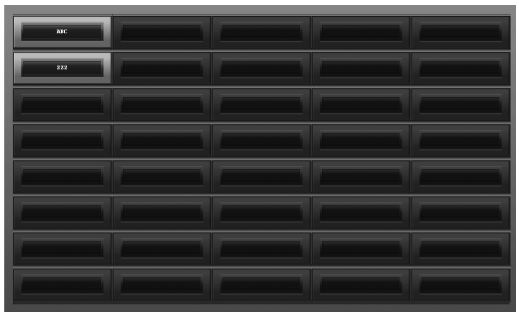
Enables selection of the name of the operator carrying out the examination.



user tool

Names shown for selection on the operator selection screen are set using user tools.





Operator Name List

A list of operator names registered in CS-3 is displayed in button format.
To select a name, touch the corresponding button.

- **The button corresponding to the name selected will be displayed in a green frame.**

Scroll Buttons [◁◁ · ▷▷]

Used to scroll pages of operator names.
The current page number and the total page count are displayed between buttons.

[CANCEL] Button

Cancels the operator name selection mode.

- **The system menu screen is displayed.**

[OK] Button

Sets the selected operator name.

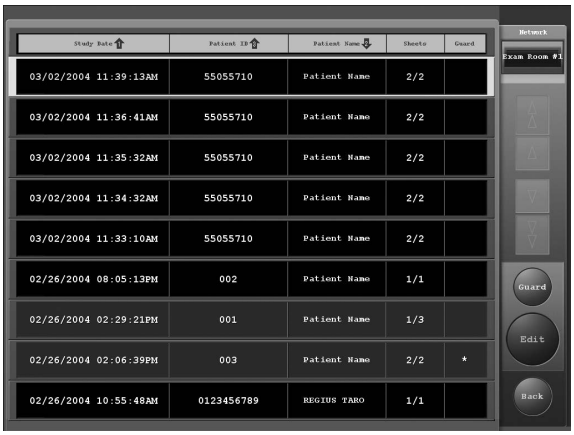
- **The system menu screen is displayed.**

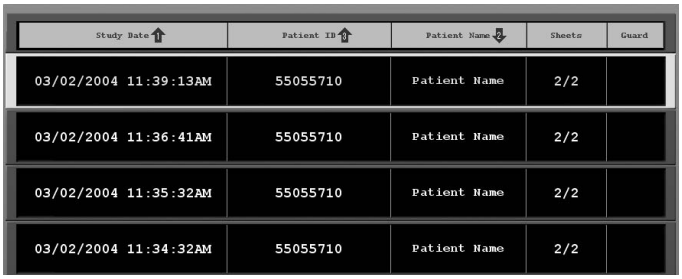
p.128 System Menu Screen

Examination History Screen

Enables referencing of patient data for which examination is being carried out or has already been completed.

- **Selection of the data to be referenced may be made from the patient data list.**
- **Referenced images may be output again.**
- **The image of selected patient data may be guarded.**





When the disk capacity is full, images on the examination history screen are automatically erased from the oldest. A guard should be applied to the image in the examination history screen to avoid being erased.

Guard
Guard the image of selected patient data to protect it from deletion from the hard disk.

Examination History Display

Selection of patient data to be output again or guarded may be made here.

- **The suspended patient data is displayed in a purple color.**

[Network] Button

Enables “Image Sharing” function and allows you to browse the images processed on the other Consoles. Name of the Console whose images are currently browsed will appear on the button.

- **“Console Select” screen will be displayed.**

p.141 Console Select Screen

Scroll Buttons [△ · ▽]
Scrolls the patient data list one item at a time.

Scroll Buttons [⏫ · ⏬]
Scrolls the patient data list nine items at a time.

[Guard] Button
Used to guard the image of selected patient data and protect it from deletion from the hard disk.

- **Images from patient data that are guarded are indicated by display of "G" in the "guard" item on the examination history screen.**
- **Touching the guarded patient data again removes the guard.**

[Edit] Button
Appears when the order that has been output is selected.

- **The image reference screen is displayed.**

p.142 Image Reference Screen

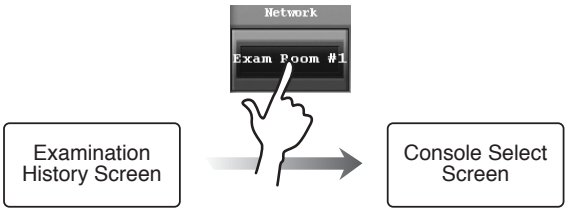
[Back] Button
Terminates the examination history screen and returns to the system menu screen.

p.128 System Menu Screen

Console Select Screen

Enables to browse the images processed on the other Consoles using the “Image Sharing” function.
Select the target Console on this screen.

p.62 Image Sharing



Local Button

Touch this button to return to your Console that is currently operated. Name of the Console will be displayed on the button. Touching this button will select your Console and changes the frame color to green.

Network Button

Selects the target Console that shall be browsed. Consoles selectable for browsing are displayed on the buttons. Touching this button will select the target Console and changes the frame color to green.

[CANCEL] Button

Cancels the selection of the target Console.

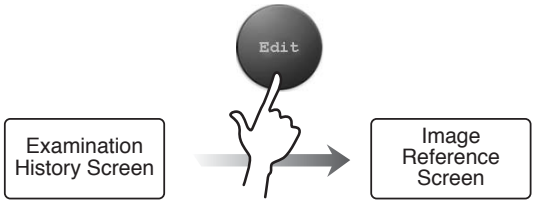
- **Returns to the “Exam History” screen.**

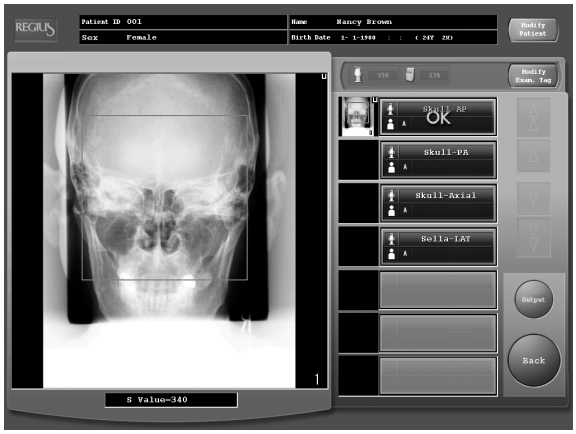
[OK] Button

Displays the “Exam History” screen of the selected Console.

Image Reference Screen

Enables referencing of images from examinations already completed. Repeat output of images is also possible.





Patient Data Display

Display of patient ID, name, sex and date of birth.

- **In cases where the patient data is insufficient or wrong, touch the [Modify Patient] button to modify the patient data.**

[Modify Patient] Button

Enables modifications to referenced patient data.

p.95 Patient Data Amendment Screen

Order List Display

A list of executed orders is displayed in button format. Selection of orders to be displayed may be made. Clicking on the required order will result in display of that order in a green frame.

- **A maximum of 7 exposure orders may be displayed on screen. In cases where there are more than 8 orders, the scroll button may be clicked on to scroll the display.**

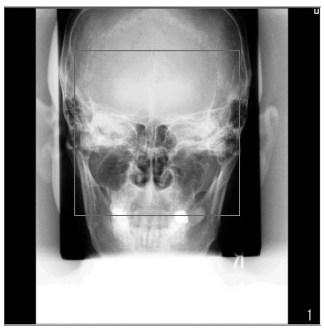


Image Display

- **To modify detailed data and additional examination data settings, click on any point in the frame.**

p.101, 103, 111, 118
Detailed Data Setting Screen
(Acquisition)
(Image Processing)
(Print Format)
(Overlay)

[Modify Exam. Tag] Button
Enables change to the parameters (reader used, exposed body part) of the order selected from the order list.

Scroll Buttons [△ · ▽]
Used to scroll the order list 1 order at a time.

Scroll Buttons [⏫ · ⏬]
Used to scroll the order list 7 orders at a time.

[Reason] button
Appears when the order that has been aborted is selected.
- **Display the "Reject Reasons" screen.**

[Output] Button
Used to display the "**Output Setting Screen**".

p.144 Output Setting Screen

[Back] Button
Terminates the image reference screen and returns to the examination history screen.

p.139 Examination History Screen

While browsing the images on the other Console using the “Image Sharing”, the screen will switch to “Console Select” screen instead of “Exam History” screen when the [Back] button is touched.

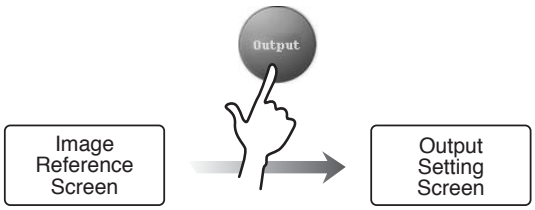
[REGIUS] Button
Enables checking of the status of output devices connected to CS-3 (reader devices, host, printers, RIS) as well as the used and remaining capacities of the hard disk incorporated into CS-3.
If an error occurs on the CS-3 or any other devices connected to the CS-3 such as input/output devices, the [REGIUS] button is displayed in red color.
- **The device status screen is displayed.**

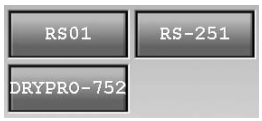
p.141 Console Select Screen
p.129 Device Status Screen

Color of the [REGIUS] button.
Black : Normal
Red : Error occurred

Output Setting Screen

Enables setting of the device for repeat image output.





Output Destination Button

Enables selection of the device to which the image is to be output.

- **Multiple output devices may be selected.**

[OK] Button

Enables image output to the selected device.

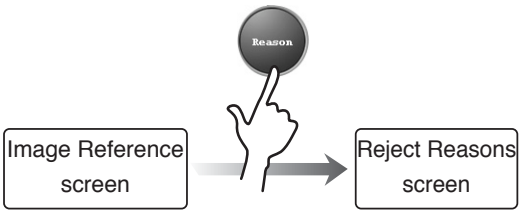
- **The screen will change from the output setting screen to the image reference screen.**

[CANCEL] Button

Cancels image output.

Reject Reasons Screen

Edit the reason for image abortion and whether the reexamination is done or not.



[Reject Reasons] Button
Select the reason for image abortion.

[Repeat Exam] Button
Select whether the reexamination is done or not.

[CANCEL] Button
Close the “Reject Reasons” screen without effecting the reason for image abortion.

[OK] Button
Close the “Reject Reasons” screen after effecting the reason for image abortion.

5

Operator Security Mode

Using the operator security mode to entitle an operator to start up the CS-3 or to change the operator name will help avoid mishandling the system as well as clarify the person responsible for the operation.
In this chapter, how to operate the operator security mode is detailed.

User Name & Access Right

When the operator security mode is in effect, all operation information of any operator (hereinafter referred to as "user") can be stored in the CS-3 as an operation log unique to that user. These users can be classified into three categories as follows.

- **Administrator**
- **Super User**
- **Technologist**

To use the operator security mode, it is required for the user to keep the user name and password in mind.

	User Management	Operation Log Management	User Tool Operation	Examiniation
Administrator	●	●	●	●
Super User			●	●
Technologist				●

Administrator
This user holds the highest authority to access the system.
A system administrator of the CS-3 is entitled to this authority, and capable of doing any operation.

Super User
This user holds the authority next to the "Administrator", and capable of editing the User Tool except for "User Management" and "Operation Log Management".

Technologist
This user holds no authority to implement any setting on the CS-3, but "Study" only.

Refer to "User Tool" manual for the details of how to operate "User Management", "Operation Log Management" and "User Tool Operation".

Log In

When the operator security mode is in effect, it is necessary to input the user name and password when starting up the CS-3 and restoring from the screen saver.

p.23 Start Up

Log In at start up

1 Switch on the CS-3 Operation Unit stand-by button.

2 Depress the power button located on the front panel of the CS-3 Control Unit.

- **A CS-3 start up message and an OS (Operating System) start up message will be displayed in order on the CS-3 Operation Unit.**
- **After a short time, the CS-3 system start up screen will be displayed. During display of this screen, internal system initialization will be executed.**
- **After completion of initialization, the Log In Screen will be displayed.**

Prior to turning the power of the CS-3 on, check that all devices (reader, printer, host computer, etc.) are correctly connected and their power is turned on.

3 Input your user name and password, and touch [ENTER] key.

- **Input the user name and password using the touch panel on the screen or hard keyboard.**
- **When the user name and password are verified correct, an initial screen will be displayed.**
- **If the user name and/or password are wrong, a message to prompt inputting correct data will be displayed, and the screen cannot to be switched to other one.**

Log in from log in screen

A log in screen will be displayed when returning from the screen saver or changing the user name. Input the user name and password of the one who initiates operation, then touch [Enter] key.

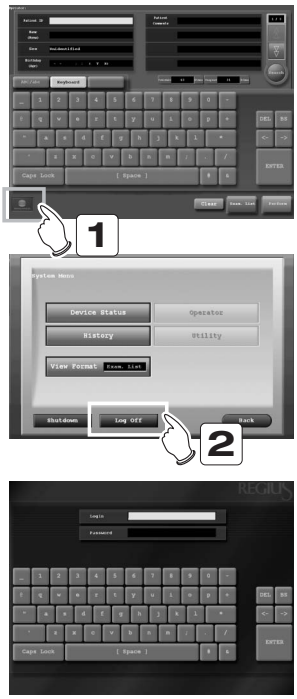
- **Input the user name and password using the touch panel on the screen or hard keyboard.**
- **When the user name and password are verified correct, an initial screen will be displayed.**
- **If the user name and/or password are wrong, a message to prompt inputting correct data will be displayed, and the screen cannot to be switched to other one.**

To return to the log in screen from screen saver, just touch the screen of CS-3 Operation Unit or any key on the hard keyboard.

Log Off

While the operator security mode is in effect, implement log off when you are leaving the CS-3 or other user comes and sits on your place to succeed the operation of CS-3.
There are two methods to implement log off.

Log off on system menu



1 Display the system menu from the initial screen.

- **When the operator security mode is in effect, [Log Off] button is located on the system menu, and the buttons which can be accessed by user are differently configured.**

2 Touch [Log Off] button.

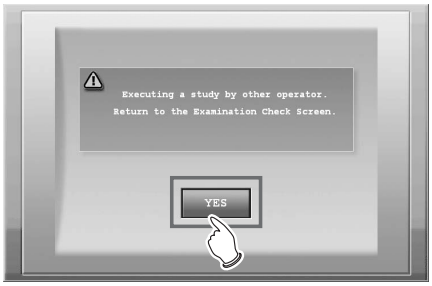
- **A log in screen will be displayed.**

When the system is set so that it uses screen saver, in addition to two methods in the right, log off will be automatically implemented also by start up of screen saver. In this case, a log in screen will be displayed when returning from the screen saver, and input of the user name and password will be requested.

Log off using a hard keyboard

Pressing [Alt] + [Esc] keys at the same time will enable log off from any screen. A log off screen will be displayed when log off is implemented.

In the case that the application is logged off in between start and completion of study, and other user implements log in, a message requesting a confirmation that the previous user has logged off before the study is completed.



6

Troubleshooting

This chapter describes typical methods of trouble shooting and a list of error messages displayed on CS-3.

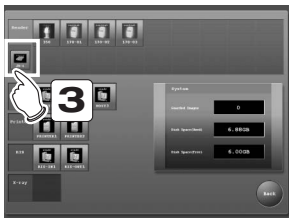
Trouble of JM

In systems furnished with a backup JM, it is possible to switch to the backup unit whenever a fault occurs on the standard JM. The switchover can be effected from a single CS-3 unit.
In such cases, it is unnecessary to re-boot the CS-3 unit, although the REGIUS MODEL 170/190 must be re-booted.
The procedure for switchover to the backup unit when a fault occurs on the JM unit is described below.
Since occurrence of a fault on the JM unit will render photography using REGIUS MODEL 170/190 impossible, switchover to the backup unit must be carried out.

1 The message shown at left is displayed when a fault occurs on JM.
To close the message window, touch the [YES] button.

2 Display the system status screen.

- **This screen can be invoked by touching the [system status] button on the "system menu" or the [REGIUS] button on the "examination check screen".**



3 Touch the [JM] button.

- **The JM status check screen will be displayed.**
- **The "backup" button is enabled (made available for selection) only when a fault has occurred on JM.**

4 Touch the [backup] button.

- **A message will be displayed indicating that switchover from JM to the backup unit will disable all cassette registrations.**

5 Touch the [YES] button.

- **All cassette registrations made in the system will be disabled.**
- **A message requesting confirmation that all REGIUS MODEL 170/190 and CS-3 units are activated will be displayed.**
- **Touching the [NO] button will abort switchover to the backup unit and produce display of the system status screen; note, however, that since there is s fault on JM, photography using REGIUS MODEL 170/190 will be impossible.**

6 Touch the [YES] button after checking that all REGIUS MODEL 170/190 and CS-3 units are activated.

- **The display will return to the CS-3 status check screen.**
- **A message indicating that switchover is in process will be displayed on the CS-3 status check screen. Switchover to the backup JM may take several minutes.**
- **After completion of switchover to the backup JM, a message recommending re-booting of REGIUS MODEL 170/190 will be displayed.**

After switching to the backup unit following the procedure detailed here when a fault occurs on JM, the nearest service center should be contacted as soon as possible.

7 Touch the [YES] button to re-boot all REGIUS MODEL 170/190 units.

- **Photography using REGIUS MODEL 170/190 will again be possible after completion of switchover to the backup JM**

After completion of switchover to the backup JM, the message shown below will be displayed on other CS-3 units connected to the same system.
Touch the [YES] button to close the message window.
Photography using REGIUS MODEL 170/190 will now be possible.

After completing switchover of functions to the backup JM, the nearest service center should be contacted as soon as possible.

Error List

Error messages displayed on CS-3 together with methods of resolution are listed below.

Concerning the Software / Hardware

Error No.	Error Message	Remedy
1000	Resource Error[X,X]. Restart CS-3, please.	Restart the CS-3. ↓ The same error occurs repeatedly. Contact your Service Representative.
1001	Resource Error[X,X]. Restart CS-3, please.	
1002	Resource Error[X,X]. Restart CS-3, please.	
1003	Resource Error[X,X]. Restart CS-3, please.	
1004	Resource Error[X,X,X]. Restart CS-3, please.	
1005	Resource Error[X,X,X]. Restart CS-3, please.	
1006	Resource Error[X,X]. Restart CS-3, please.	
1007	Resource Error[X,X]. Restart CS-3, please.	
1008	Resource Error[X,X]. Restart CS-3, please.	
1010	Resource Error[X,X]. Restart CS-3, please.	
1011	Resource Error[X,X]. Restart CS-3, please.	
1012	Resource Error[X,X]. Restart CS-3, please.	
1015	Resource Error[X,X]. Restart CS-3, please.	
1016	Resource Error[X,X]. Restart CS-3, please.	
1020	Resource Error[X,X]. Restart CS-3, please.	
1021	Resource Error[X,X]. Restart CS-3, please.	
1022	Resource Error[X,X]. Restart CS-3, please.	
1023	Resource Error[X,X]. Restart CS-3, please.	
1024	Resource Error[X,X]. Restart CS-3, please.	
1025	Resource Error[X,X]. Restart CS-3, please.	
1026	Resource Error[X,X]. Restart CS-3, please.	
1027	Resource Error[X]. Restart CS-3, please.	
1030	Resource Error[X,X]. Restart CS-3, please.	
1031	Resource Error[X,X]. Restart CS-3, please.	
1032	Resource Error[X,X]. Restart CS-3, please.	
1033	Resource Error[X,X]. Restart CS-3, please.	
1040	Resource Error[X,X]. Restart CS-3, please.	
1041	Resource Error[X,X]. Restart CS-3, please.	
1042	Resource Error[X,X]. Restart CS-3, please.	
1043	Resource Error[X,X]. Restart CS-3, please.	
1044	Resource Error[X,X]. Restart CS-3, please.	
1050	Resource Error[X,X]. Restart CS-3, please.	
1051	Resource Error[X]. Restart CS-3, please.	
1052	Resource Error[X]. Restart CS-3, please.	
1053	Resource Error[X]. Restart CS-3, please.	
–	JM Error. Please call service. Or change to Backup JM if it exists.	Change to Backup JM if it exists.
–	Hard Disk Error. Please call service.	Restart the REGIUS MODEL 170/190. Check the connection of network ↓ The same error occurs repeatedly. Contact your Service Representative.

Concerning the Communication (HOST/Printer/RIS)

Error No.	Error Message	Remedy
1060	Network Setting Error[X,X]. Please call service.	Check the network devices. ↓ **No malfunction was found on the network devices.** Check the HUB and Cable. ↓ **No malfunction was found on the HUB or Cable.** Restart the CS-3. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
1061	Network Communication Error[X]. Please check network devices.	
1062	Network Communication Error[X,X]. Please check network devices.	
1063	Network Communication Error[X,X]. Please check network devices.	
1064	Network Communication Error[X,X,X]. Please check network devices.	
1065	Network Communication Error[X,X]. Please check network devices.	
1066	Network Communication Error[X,X]. Please check network devices.	
1067	Network Communication Error[X]. Please check network devices.	
1068	Network Communication Error[X]. Please check network devices.	
1069	Network Communication Error[X]. Please check network devices.	
1070	Network Communication Error[X]. Please check network devices.	
1071	Network Communication Error[X,X]. Please check network devices.	
1072	Network Communication Error[X,X]. Please check network devices.	
1132	Network Setting Error[X]. Please call service.	Contact your Service Representative.
1133	Network Setting Error[X]. Please call service.	
1134	Network Setting Error[X]. Please call service.	
1135	Network Setting Error[X]. Please call service.	
1120	Connection Reject. Please check network devices.	
1121	Connection Reject. Please check network devices.	
1122	Network Setting Error. Please call service.	
1123	Network Setting Error. Please call service.	
1110	Connection Reject[X]. Please check network devices.	Check the network devices. ↓ **No malfunction was found on the network devices.** Check the HUB and Cable. ↓ **No malfunction was found on the HUB or Cable.** Restart the CS-3. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
1111	Connection Reject[X,X,X]. Please check network devices.	
1112	Invalid Received Data[X]. Please check network devices.	
1113	Invalid Received Data[X,X,X]. Please check network devices.	
1124	Communication Abort[X]. Please check network devices.	
1131	Invalid Received Data[X,X]. Please check network devices.	
1100	Order Failure[X,X][X]. Please check order.	Check the order. ↓ **No malfunction was found on the order.** Contact your Service Representative.
1101	Order Failure. Please check order.	
1102	Order Failure[X,X][X]. Please check order.	
1103	Order Failure[X,X][X]. Please check order.	
1104	Order Failure[X,X][X]. Please check order.	
1105	Order Failure. Please check order.	
1130	Illegal Image Data[X]. Can't output processing.	Contact your Service Representative.
1150	Illegal Image Data[X]. Can't output processing.	
1151	Illegal Image Data[X]. Can't output processing.	
1160	Illegal Image Data[X,X]. Can't output processing.	
1140	Illegal Image Data[X,X]. Please check network devices.	

Concerning the Queue Control

Error No.	Error Message	Remedy
1400	Queue Error[X,X]. Please call service.	Contact your Service Representative.
1401	Queue Error[X,X]. Please call service.	
1402	Queue Error. Please call service.	

Concerning the RIS

Error No.	Error Message	Remedy
1450	Exam. Information Result Error[X,X]. Please call service.	Check the order from the RIS. ↓ **No malfunction was found on the order from the RIS.** Contact your Service Representative.
1452	Queue Error. Please call service.	
1500	System Parameter Error[X,X,X,X]. Please call service.	
1501	System Parameter Error[X,X,X,X]. Please call service.	
1502	System Parameter Error. Please call service.	
1503	System Parameter Error[X,X][X]. Please call service.	
1504	System Parameter Error[X,X][X,X]. Please call service.	
1505	System Parameter Error[X,X]. Please call service.	
1506	System Parameter Error[X,X]. Please call service.	
1507	System Parameter Error[X,X][X,X,X]. Please call service.	
1508	System Parameter Error[X,X]. Please call service.	
1509	System Parameter Error[X,X][X]. Please call service.	
–	Failed to register and process the receiving Study Order from RIS.	
–	Failed to register and process the receiving Study Order from RIS.	
–	Failed to register and process the receiving Study Order from RIS.	
–	Failed to register and process the receiving Study Order from RIS.	
–	Study Order Registration Error. Please restart CS-3.	Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.

Concerning the Reading

Error No.	Error Message	Remedy
1214	Illegal Image Data.	Contact your Service Representative.
1215	Order was deleted.	
1250	Reader Setting Error. Please call service.	

Concerning the Cassette Readers

Error No.	Error Message	Remedy
10000	Memory Error	Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
11000	Hardware Error	
12000	Msg Receiving Timeout (High Voltage ON)	
12001	Msg Receiving Timeout (Laser ON)	
12002	Msg Receiving Timeout (Mech. Ready)	
12003	Msg Receiving Timeout (Mech. Standby)	
12010	Serial communication Error (Mech. Resend Overflow)	
12011	Serial communication Error (Mech. CRC error Overflow)	Restart the REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
12012	Serial communication Error (Mech. Overrun)	
12020	Msg Error (Mech. illegal Msg)	
12200	Msg Receiving Timeout (Net Initialize)	
12201	Msg Receiving Timeout (Net Ready)	
12202	Msg Receiving Timeout (Put Shading)	
12203	Msg Receiving Timeout (Status Check)	
12204	Msg Receiving Timeout (Barcode Seek)	
12205	Msg Receiving Timeout (Net Command)	
12206	Msg Receiving Timeout (Reader End)	
12207	Msg Receiving Timeout (Put Qrv)	
12208	Msg Receiving Timeout (Put Config)	
12209	Msg Receiving Timeout (Put Information)	
12210	Serial communication Error (Net Resend Overflow)	
12211	Serial communication Error (Net CRC error Overflow)	
12212	Serial communication Error (Net Overrun)	
12220	Msg Error (Net illegal Msg)	
13000	Optical Unit Error (H_Sync)	
13001	Optical Unit Error (Polygon ID)	
13030	SCB Control Error (DMA transfer)	
13031	SCB Control Error (SCOM communication)	
14000	Signal Proc Error (Gain Overflow)	
14001	Signal Proc Error (Gain Underflow)	
14002	Signal Proc Error (Offset Overflow)	
14003	Signal Proc Error (Offset Underflow)	
14010	Signal Proc Error (QRV Overflow)	
14011	Signal Proc Error (QRV Underflow)	
22101	Serial Communication Error (N1 Counter Over)	
22103	Serial Communication Error (N3 Counter Over)	
22104	Serial Communication Error (N4 Counter Over)	
23000	Program Error (Main Control)	
23200	Program Error (Data File Size)	
23900	Program Error (Firmware Update)	
24000	Network Error (JM Connection)	
25000	Network Error (Non-Timeout)	
25100	Network Error (Timeout:in General Communication)	
25200	Network Error (Timeout:in Image Transmission)	
25210	Network Error (Timeout:after Image Scanning)	
25300	Network Error (Timeout:Image Re-Transfer State)	
26000	Operation Error (Invalid Job)	

Concerning the Cassette Readers

Error No.	Error Message	Remedy
26100	Operation Error (Modeless Job)	Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
26200	Operation Error (Invalid Console)	
26300	Operation Error (Job under Erasing)	
26900	Operation Error (PowerOFF under Job Execution)	
26999	Operation Error (Not-Supported Command)	
4001	HP1 Sensor NG(Transport Unit)	
4002	HP1 Sensor NG(Transport Unit)	
4011	HP2 Sensor NG(Transport Unit)	Restart the REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
4012	HP2 Sensor NG(Transport Unit)	
4013	HP2 Sensor NG(Transport Unit)	
4014	HP2 Sensor NG(Transport Unit)	
4015	HP2 Sensor NG(Transport Unit)	
4021	Alignment Sensor NG(Feeder)	
4022	Alignment Sensor NG(Adhesion)	
4023	Alignment Sensor NG(Shelter)	
4024	Alignment Sensor NG(Discharge)	
4025	Alignment Sensor NG	
4026	Alignment Right-side Sensor NG(Initialize)	
4027	Alignment Left-side Sensor NG(Initialize)	
4031	Elevator Detective Sensor NG(Feeder)	
4032	Elevator Detective Sensor NG(Adhesion)	
4033	Elevator Detective Sensor NG(Shelter)	
4034	Elevator Detective Sensor NG(Before Elevating)	
4035	Lock HP Sensor NG	
4036	Elevator HP Sensor NG	
4037	Elevator Detective Sensor NG(After Elevating)	
4041	Feeder's Shutter Opening Sensor NG	
4042	Feeder's Shutter Closing Sensor NG	
4051	Discharge's Door Closing Sensor NG	
4061	Slow Scan HP Sensor NG	
4062	Backboard's Adhesion Detective Sensor NG	
4063	Backboard's Wrap Detective Sensor NG	
4064	V-Sync Sensor NG	
4065	Backboard's Adhesion Detective Sensor NG	
4066	Backboard's Adhesion Detective Sensor NG	
4067	Backboard's Adhesion Detective Sensor NG	
4068	Backboard's Adhesion Detective Sensor NG	
4069	Backboard's Adhesion Detective Sensor NG	
4070	Backboard's Adhesion Detective Sensor NG	
4071	Feeder's Central Detective Sensor NG	
4072	Feeder's Left Detective Sensor NG	
4081	Erase-lamp's Current Detective Sensor 1 NG	
4082	Erase-lamp's Current Detective Sensor 2 NG	
4091	Front Door Opening Sensor NG	
4101	Slow Scan Motor NG	
4102	Transport Unit Motor NG	
4103	Elevator Motor NG	

Concerning the Cassette Readers

Error No.	Error Message	Remedy
4104	Alignment Motor NG	Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
4105	Feeder's Shutter Open/Close Timeout	
4106	Lock Timeout	
4150	Lock Initial Processing	
4151	Feeder's Shutter Initial Processing	
4152	Elevator Initial Processing	
4153	Alignment Initial Processing	
4154	Transport Unit Initial Processing	Restart the REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Restart the CS-3 and REGIUS MODEL 170/190. ↓ **The same error occurs repeatedly.** Contact your Service Representative.
4155	Slow Scan Initial Processing	
4156	Transfer Action 1 Starting NG	
4157	Transfer Action 1 Starting NG	
4158	Feeder's Discharge Action Starting NG	
4159	Discharge Action Starting NG	
4160	Feeder's Shutter Opening NG	
4161	Feeder's Shutter Closing NG	
4162	Lock Starting NG	
4163	Cassette Falling Detective Time NG	
4164	No Notice of Permission on Erase-lamp ON	
4165	No Notice of Permission on Erase-lamp OFF	
4200	GetStatus Receiving Timeout(Initialize)	
4201	GetStatus Receiving Timeout(Ready)	
4202	GetStatus Receiving Timeout(Detect Barcode)	
4203	GetStatus Receiving Timeout(High-voltage ON)	
4204	GetStatus Receiving Timeout(Laser ON)	
4205	GetStatus Receiving Timeout(Cancel Barcode)	
4206	GetStatus Receiving Timeout(Processing)	
4207	GetStatus Receiving Timeout(Pause)	
4208	GetStatus Receiving Timeout(Close Front Door)	
4209	GetStatus Receiving Timeout(Open Front Door)	
4210	GetStatus Receiving Timeout(Error)	
4211	GetStatus Receiving Timeout(Standby)	
4212	GetStatus Receiving Timeout(Transporting of Erase Mode)	
4213	GetStatus Receiving Timeout(Power off after Ready)	
4214	Registration OK Receiving Timeout	
4215	GetStatus Receiving Timeout(Laser ON)	
4216	GoBackward Receiving Timeout	
4217	Laser ON without Sending High-voltage ON(1)	
4218	Laser ON without Sending High-voltage ON(2)	
4219	Invalid Command	
4900	Cassette Exists(Elevator)	
4901	Cassette Exists(Alignment)	
4902	Cassette Exists(Open Door of Discharge)	
4903	Cassette Exists(Backboard Adhesion)	
4904	Turn Off Erase-lamps(2)	
4905	SCB Communication Error	
4906	Warped Cassette	
4907	Cassette Opening Error	

Concerning the Cassette Readers

Error No.	Error Message	Remedy
4908	Falling Cassette	Restart the CS-3 and REGIUS MODEL 170/190. ↓ The same error occurs repeatedly. Contact your Service Representative.
4909		
4910		
4914		

Concerning the Upright Reader

Error No.	Error Message	Remedy
1200	Reader Communication Error[X,X,X,X,X,X]. Please check reader.	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
1201	Reader Communication Error[X,X,X,X,X]. Please check reader.	
1202	Reader Communication Error[X,X,X]. Please check reader.	
1203	Reader Communication Error[X,X,X]. Please check reader.	
1204	Reader Communication Error[X,X]. Please check reader.	
1205	Internal Locked Error. Please call service.	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
1217	Invalid Exam. Tag. Please check the Exam. Tag.	
1240	Warning: Low LD laser emitting in REGIUS reader. Please call service.	
1241	Warning: Erase-lamp-A Error. Please call service.	
1242	Warning: Erase-lamp-B Error. Please call service.	
0202	No-shut-off A error of intermittent erase lamp	
0203	No-shut-off B error of intermittent erase lamp	
0204	No-shut-off AB error of intermittent erase lamp	
0241	Communications error for correcting CPU status	
0242	Correcting CPU status error	
0261	Communications error for correcting CPU error command	
0262	Overflow of the correcting CPU error status	
02A1	Flame memory error	
0321	Upper&lower side sensor simultaneous detection error	
0341	Servomotor alarms(overheated driver)	
0342	Servo motor alarms(excess current)	
0343	Servo motor alarms(overflow)	
0361	Upper&lower side sensor simultaneous detection error	
0362	Upper sensor returning from detection error	
0363	Lower side sensor detection timeout	
0364	Upper sensor returning from detection error in 2 sec. after the start of operation	
0365	Servo motor alarms(overheated driver)	
0366	Servo motor alarms(excess current)	
0367	Servo motor alarms(overflow)	
0401	Servo motor alarms(overheated driver)	
0402	Servo motor alarms(excess current)	
0403	Servo motor alarms(overflow)	
0411	Lower sensor returning from detection error in 2 sec. after the start of operation	
0412	Servo motor alarms(overheated driver)	
0413	Servo motor alarms(excess current)	
0414	Servo motor alarms(overflow)	
0421	Timeout&over error between sensors	
0422	Timeout&under error between sensors	
0423	Timeout error in specified number of pulses	
0424	Over error between sensors	
0425	Under error between sensors	
0431	Illuminating error of erase AB	
0501	Servo motor alarms(overheated driver)	
0502	Servo motor alarms(excess current)	
0503	Servo motor alarms(overflow)	
0511	Upper sensor returning from detection error in 2 sec. after the start of operation	
0512	Servo motor alarms(overheated driver)	

Concerning the Upright Reader

Error No.	Error Message	Remedy
0513	Servo motor alarms(excess current)	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
0514	Servo motor alarms(overflow)	
0531	Sub-scanning moving down timeout	
0541	No-shut-off A error of erase lamp	
0542	No-shut-off B error of erase lamp	
0543	No-shut-off AB error of erase lamp	
0551	Polygon PLL lock error	
0561	HSync is active	
0562	The polygon index is active	
0571	No HSync is detected	
0572	No enough HSync	
0573	Too much HSync	
0574	No polygon index is detected	
0575	Too many polygon indexes	
0581	LD excess current 2 error	
0582	No LD Strong HSync is detected	
0583	LD excess current 1 error	
0584	No LD Strong HSync is detected. (1 error)	
0585	No LD weak HSync is detected. (2 error)	
0586	No HSync is detected. (2 error)	
0587	No LD weak HSync is detected. (3 error)	
0588	No HSync is detected. (3 error)	
0589	15V power supply abnormal error	
058A	No LD weak HSync is detected. (1 error)	
058B	No HSync is detected. (1 error)	
0591	Polygon PLL lock error before gain offset	
0592	Communications abnormality for correcting CPU during gain offset	
0593	HSync error during gain offset	
0594	Out-of-target(Hi) error	
0595	Out-of-target(Lo) error	
0596	Gain calculating error	
0597	Offset calculating error	
0701	No-illuminated intermittent erase lamp	
0702	No-shut-off A error of intermittent erase lamp	
0703	No-shut-off B error of intermittent erase lamp	
0704	No-shut-off AB error of intermittent erase lamp	
0711	No-illuminated intermittent erase lamp	
0712	No-shut-off A error of intermittent erase lamp	
0713	No-shut-off B error of intermittent erase lamp	
0714	No-shut-off AB error of intermittent erase lamp	
0802	No-shut-off A error of intermittent erase lamp	
0803	No-shut-off B error of intermittent erase lamp	
0804	No-shut-off AB error of intermittent erase lamp	
0811	Upper&lower sensor simultaneous detection error	
0812	Lower sensor detection error	
0813	Servomotor alarms(overheated driver)	
0814	Servo motor alarms(excess current)	

Concerning the Upright Reader

Error No.	Error Message	Remedy
0815	Servo motor alarms(overflow)	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
0821	Communications error for correcting CPU reading command	
0841	Polygon PLL lock error	
0862	Lower sensor returning from detection error	
0863	Lower sensor returning from detection error in 2 sec. after the start of operation	
0864	Polygon PLL lock error	
0865	HSync absent 1 error	
0866	HSync absent 2 error	
0867	Too much HSync	
0868	Servomotor alarms(overheated driver)	
0869	Servo motor alarms(excess current)	
086A	Servo motor alarms(overflow)	
0901	Over error between sensors	
0902	Under error between sensors	
0911	Illuminating error of erase AB	
0A01	Servomotor alarms(overheated driver)	
0A02	Servo motor alarms(excess current)	
0A03	Servo motor alarms(overflow)	
0A11	Upper sensor returning from detection error in 2 sec. after the start of operation	
0A12	Servomotor alarms(overheated driver)	
0A13	Servo motor alarms(excess current)	
0A14	Servo motor alarms(overflow)	
0A31	Sub-scanning moving down timeout	
0A41	No-shut-off A error of erase lamp	
0A42	No-shut-off B error of erase lamp	
0A43	No-shut-off AB error of erase lamp	
0B02	No-shut-off A error of intermittent erase lamp	
0B03	No-shut-off B error of intermittent erase lamp	
0B04	No-shut-off AB error of intermittent erase lamp	
0B11	Servomotor alarms(overheated driver)	
0B12	Servo motor alarms(excess current)	
0B13	Servo motor alarms(overflow)	
0B21	Lower sensor returning from detection error in 2 sec. after the start of operation	
0B22	Servomotor alarms(overheated driver)	
0B23	Servo motor alarms(excess current)	
0B24	Servo motor alarms(overflow)	
0B31	Timeout&over error between sensors	
0B32	Timeout&under error between sensors	
0B33	Timeout error in specified number of pulses	
0B34	Over error between sensors	
0B35	Under error between sensors	
0B41	Illuminating error of erase AB	
0C01	Servomotor alarms(overheated driver)	
0C02	Servo motor alarms(excess current)	
0C03	Servo motor alarms(overflow)	
0C11	Upper sensor returning from detection error in 2 sec. after the start of operation	
0C12	Servomotor alarms(overheated driver)	

Concerning the Upright Reader

Error No.	Error Message	Remedy
0C13	Servo motor alarms(excess current)	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
0C14	Servo motor alarms(overflow)	
0C31	Sub-scanning moving down timeout	
0C41	No-shut-off A error of erase lamp	
0C42	No-shut-off B error of erase lamp	
0C43	No-shut-off AB error of erase lamp	
0D02	No-shut-off A error of intermittent erase lamp	
0D03	No-shut-off B error of intermittent erase lamp	
0D04	No-shut-off AB error of intermittent erase lamp	
0E21	Upper&lower sensor simultaneous detection error	
0E41	Servomotor alarms(overheated driver)	
0E42	Servo motor alarms(excess current)	
0E43	Servo motor alarms(overflow)	
0E61	Upper&lower sensor simultaneous detection error	
0E62	Upper sensor returning from detection error	
0E63	Lower sensor detection timeout	
0E64	Upper sensor returning from detection error in 2 sec. after the start of operation	
0E65	Servomotor alarms(overheated driver)	
0E66	Servo motor alarms(excess current)	
0E67	Servo motor alarms(overflow)	
0E91	Servomotor alarms(overheated driver)	
0E92	Servo motor alarms(excess current)	
0E93	Servo motor alarms(overflow)	
0EA1	Lower sensor returning from detection error in 2 sec. after the start of operation	
0EA2	Servomotor alarms(overheated driver)	
0EA3	Servo motor alarms(excess current)	
0EA4	Servo motor alarms(overflow)	
0EB1	Timeout&over error between sensors	
0EB2	Timeout&under error between sensors	
0EB3	Timeout error in specified number of pulses	
0EB4	Over error between sensors	
0EB5	Under error between sensors	
0EC1	Illuminating error of erase AB	
0F01	Servomotor alarms(overheated driver)	
0F02	Servo motor alarms(excess current)	
0F03	Servo motor alarms(overflow)	
0F11	Upper sensor returning from detection error in 2 sec. after the start of operation	
0F12	Servomotor alarms(overheated driver)	
0F13	Servo motor alarms(excess current)	
0F14	Servo motor alarms(overflow)	
0F31	Sub-scanning moving down timeout	
0F41	No-shut-off A error of erase lamp	
0F42	No-shut-off B error of erase lamp	
0F43	No-shut-off AB error of erase lamp	
0F51	Polygon PLL lock error	
0F61	HSync is active	
0F62	The polygon index is active	

Concerning the Upright Reader

Error No.	Error Message	Remedy
0F71	No HSync is detected	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
0F72	No enough HSync	
0F73	Too much HSync	
0F74	No polygon index is detected	
0F75	Too many polygon indexes	
0F81	LD excess current 2 error	
0F82	No LD Strong HSync is detected(2 error)	
0F83	LD excess current 1 error	
0F84	No LD Strong HSync is detected. (1 error)	
0F85	No LD weak HSync is detected. (2 error)	
0F86	No HSync is detected. (2 error)	
0F87	No LD weak HSync is detected. (3 error)	
0F88	No HSync is detected. (3 error)	
0F89	15V power supply abnormal error	
0F8A	No LD weak HSync is detected. (1 error)	
0F8B	No HSync is detected. (1 error)	
0F91	Polygon PLL lock error before gain offset	
0F92	Communications abnormality for correcting CPU during gain offset	
0F93	HSync error during gain offset	
0F94	Out-of-target(Hi) error	
0F95	Out-of-target(Lo) error	
0F96	Gain calculating error	
0F97	Offset calculating error	
1002	No-shut-off A error of intermittent erase lamp	
1003	No-shut-off B error of intermittent erase lamp	
1004	No-shut-off AB error of intermittent erase lamp	
1031	Log data writing error	
1051	PMT gain writing error	
1071	System data writing error	
1102	No-shut-off A error of intermittent erase lamp	
1103	No-shut-off B error of intermittent erase lamp	
1104	No-shut-off AB error of intermittent erase lamp	
1211	Flash writing error	
1311	Flash verifying error	
1402	No-shut-off A error of intermittent erase lamp	
1403	No-shut-off B error of intermittent erase lamp	
1404	No-shut-off AB error of intermittent erase lamp	
F021	DMA parity error	
F022	MPU parity error	
F024	SCSI parity error	
F025	SCSI & DMA parity error	
F026	SCSI & MPU parity error	
F029	Offset error	
F02A	Short transfer period error	
F02B	Offset error & Short transfer period error	
F02C	REQ/ACK timeout	
F031	Disconnected in transfer progress	

Concerning the Upright Reader

Error No.	Error Message	Remedy
F032	Phase error in transfer progress	Restart the CS-3 and Upright Reader. ↓ The same error occurs repeatedly. Contact your Service Representative.
F042	Command step (ATN condition detected)	
F043	Command step (ATN condition detected) & MSG received	
F047	Command step (ATN condition detected) & MSG received not received	
F054	Initial phase error	
F055	Initial phase error & MSG received	
F056	Initial phase error & STATUS received	
F05D	Initial phase error & MSG not received	
F05E	Initial phase error & STATUS not received	
F0FE	Data transfer error	
F0FF	SPC busy	
F100	Elevator stand driver(break busy signal)	
F101	Elevator stand driver(power breaker)	
F102	Elevator stand driver(overload protector)	
F103	Elevator stand driver(overload protector)	
F104	Elevator stand driver(maximal position deviation)	
F105	Elevator stand driver(excess current protector)	
F106	Elevator stand driver(excess speed)	
F107	Elevator stand driver(EEPROM data error)	
F108	Elevator stand driver(abnormal encode)	
F109	Elevator stand driver(low-voltage protector)	
F201	X-ray signal error, please turn off and on the power switch of reader	
F202	X-ray signal error, please turn off and on the power switch of reader	
F203	X-ray signal error, please turn off and on the power switch of reader	
F204	X-ray signal error, please turn off and on the power switch of reader	
F300	No-illuminated erase lamp A	
F301	No-illuminated erase lamp B	
0001	Memory error for correcting CPU	
0002	Memory error for controlling CPU	
0003	Transfer error for correcting CPU program	
0004	Transfer error for controlling CPU program	

Concerning the Printer

Error No.	Error Message	Remedy
1170	CHECK PRINTER[X]	Check the printer. ↓ If the error cannot be remedied. Contact your Service Representative.
2001	BAD RECEIVE MGZ	
2002	BAD SUPPLY MGZ	
2003	CALIBRATING	
2004	CALIBRATION ERR	
2005	CHECK CHEMISTRY	
2006	CHECK SORTER	
2007	CHEMICALS EMPTY	
2008	CHEMICALS LOW	
2009	COVER OPEN	
2010	ELEC CONFIG ERR	
2011	ELEC DOWN	
2012	ELEC SW ERROR	
2013	EMPTY 8X10	
2014	EMPTY 8X10 CLR	
2015	EMPTY 8X10 BLUE	
2016	EMPTY 8X10 DR	
2017	EMPTY 8X10 DR CLR	
2018	EMPTY 8X10 DR BLUE	
2019	EMPTY 8X10 PAPR	
2020	EMPTY 11X14	
2021	EMPTY 11X14 CLR	
2022	EMPTY 11X14 BLUE	
2023	EMPTY 11X14 DR	
2024	EMPTY 11X14 DR CLR	
2025	EMPTY 11X14 DR BLUE	
2026	EMPTY 11X14 PAPR	
2027	EMPTY 14X14	
2028	EMPTY 14X14 CLR	
2029	EMPTY 14X14 BLUE	
2030	EMPTY 14X14 DR	
2031	EMPTY 14X14 DR CLR	
2032	EMPTY 14X14 DR BLUE	
2033	EMPTY 14X14 PAPR	
2034	EMPTY 14X17	
2035	EMPTY 14X17 CLR	
2036	EMPTY 14X17 BLUE	
2037	EMPTY 14X17 DR	
2038	EMPTY 14X17 DR CLR	
2039	EMPTY 14X17 DR BLUE	
2040	EMPTY 14X17 PAPR	
2041	EMPTY 24X24	
2042	EMPTY 24X24 CLR	
2043	EMPTY 24X24 BLUE	
2044	EMPTY 24X24 DR	
2045	EMPTY 24X24 DR CLR	
2046	EMPTY 24X24 DR BLUE	

Concerning the Printer

Error No.	Error Message	Remedy
2047	EMPTY 24X24 PAPR	Check the printer. ↓ If the error cannot be remedied. Contact your Service Representative.
2048	EMPTY 24X30	
2049	EMPTY 24X30 CLR	
2050	EMPTY 24X30 BLUE	
2051	EMPTY 24X30 DR	
2052	EMPTY 24X30 DR CLR	
2053	EMPTY 24X30 DR BLUE	
2054	EMPTY 24X30 PAPR	
2055	EMPTY A4 PAPR	
2056	EMPTY A4 TRANS	
2057	EXPOSURE FAILURE	
2058	FILM JAM	
2059	FILM TRANSP ERR	
2060	FINISHER EMPTY	
2061	FINISHER ERROR	
2062	FINISHER LOW	
2063	LOW 8X10	
2064	LOW 8X10 CLR	
2065	LOW 8X10 BLUE	
2066	LOW 8X10 DR	
2067	LOW 8X10 DR CLR	
2068	LOW 8X10 DR BLUE	
2069	LOW 8X10 PAPR	
2070	LOW 11X14	
2071	LOW 11X14 CLR	
2072	LOW 11X14 BLUE	
2073	LOW 11X14 DR	
2074	LOW 11X14 DR CLR	
2075	LOW 11X14 DR BLUE	
2076	LOW 11X14 PAPR	
2077	LOW 14X14	
2078	LOW 14X14 CLR	
2079	LOW 14X14 BLUE	
2080	LOW 14X14 DR	
2081	LOW 14X14 DR CLR	
2082	LOW 14X14 DR BLUE	
2083	LOW 14X14 PAPR	
2084	LOW 14X17	
2085	LOW 14X17 CLR	
2086	LOW 14X17 BLUE	
2087	LOW 14X17 DR	
2088	LOW 14X17 DR CLR	
2089	LOW 14X17 DR BLUE	
2090	LOW 14X17 PAPR	
2091	LOW 24X24	
2092	LOW 24X24 CLR	
2093	LOW 24X24 BLUE	

Concerning the Printer

Error No.	Error Message	Remedy
2094	LOW 24X24 DR	Check the printer. ↓ If the error cannot be remedied. Contact your Service Representative.
2095	LOW 24X24 DR CLR	
2096	LOW 24X24 DR BLUE	
2097	LOW 24X24 PAPR	
2098	LOW 24X30	
2099	LOW 24X30 CLR	
2100	LOW 24X30 BLUE	
2101	LOW 24X30 DR	
2102	LOW 24X30 DR CLR	
2103	LOW 24X30 DR BLUE	
2104	LOW 24X30 PAPR	
2105	LOW A4 PAPR	
2106	LOW A4 TRANS	
2107	NO RECEIVE MGZ	
2108	NO RIBBON	
2109	NO SUPPLY MGZ	
2110	CHECK PRINTER	
2111	CHECK PROC	
2112	PRINTER DOWN	
2113	PRINTER INIT	
2114	PROC INIT	
2115	PROC OVERFLOW FL	
2116	PROC OVERFLOW HI	
2117	RECEIVER FULL	
2118	REQ MED NOT INST	
2119	REQ MED NOT AVAI	
2120	RIBBON ERROR	
2121	SUPPLY EMPTY	
2122	SUPPLY LOW	
2123	UNKNOWN	
2124	EMPTY 10X12	
2125	EMPTY 10X12 CLR	
2126	EMPTY 10X12 BLUE	
2127	EMPTY 10X12 DR	
2128	EMPTY 10X12 DR C	
2129	EMPTY 10X12 DR B	
2130	EMPTY 10X12 PAPR	

7

Optional Functions

This chapter describes the operation of optional functions available for the CS-3.

⚠ **Mammo Use is not approved in the United States of America.**

Overview of the Optional Functions

Following functions are available as options for CS-3.
These optional functions are enabled by purchasing each option separately from the CS-3 main unit.
For the types of options incorporated in your CS-3, please contact the institute's administrator or your technical representative.

Option Name	Descriptions	Refer Page
MWM/FTP/DETACH Option	Gets the Patient Info and Exam Info from the Outpatient/Exam DB.	
MPPS/DETACH Option	Sends the Exam Result to the Outpatient/Exam DB.	
HQ Mammography Option	Enables the Mammo High-Res (43.75μm) reading capability. When an exam tag key for mammo examination is selected, "Normal" (87.5μm) and "High-Res" (43.75μm) reading resolution become available to select from the [Resolution] button in the "Detailed Data Setting" screen.	
DICOM Output Additional #1	Output the image to two destinations (Output to either to choice in basic liccense)	
DICOM Output Additional #2	Output the image to three destinations (DICOM Output Addtional #1 is necessary to be installed)	
DICOM Output Additional #3	Output the image to four destinations (DICOM Output Addtional #2 is necessary to be installed)	
DICOM Output Additional #4	Output the image to five destinations (DICOM Output Addtional #3 is necessary to be installed)	
DICOM Output Package	Output the image to five destinations (DICOM Output Addtional #1/2/3/4 are not necessary to be installed)	
STITCHING Option	Image stitching (Composite Image) becomes available on the CS-3.	173
IMAGE SHARING Option	Browse the Exam History of the other CS-3s.	
DATA ANALYSIS Option	Registers and output the Exam-related data controlled by the CS-3.	
Portable Mode	Enables to use the portable mode.	Refer to Operation Manual of Portable Mode

Image Stitching Process

Procedures to stitch the images and to create a composite image are described below.

"Image Composite" function is an option exclusive to the CS-3. On the CS-3 that has not incorporated this function, "Composite Image Select" screen and "Composite Image Adjustment" screen will not be displayed.

Image Stitching Process

CS-3 can incorporate an option, "Composite Image" function. This option functions by automatically recognizing the long body part and stitching each body part to create a composite image. However, please note that recognition of the body part may not be performed properly depending on the condition for exposure, etc., resulting in incorrect stitching of the body parts. Therefore, care should always be taken to ensure the stitching borders are correct.

If the borders are improper, adjust the image position so that the border comes to correct position using the "Composite Image Adjustment" screen.

It is recommended to expose a scale and body parts at a time in order to facilitate check of the border of the stitching part later.

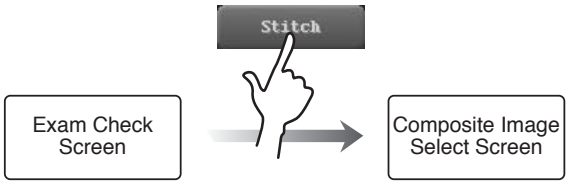
[Grid/Scale] button in the "Detailed Data Setting" screen (Overlay) is not available for composite images. However, "Grid" can be set enabled/disabled in the "Composite Image Adjustment" screen.

Implementing the stitching process will abort examination conditions (image processing, print format, overlay) that have been set before the stitching process. Examination conditions for the composite image will be applied to the images once treated in stitching process.

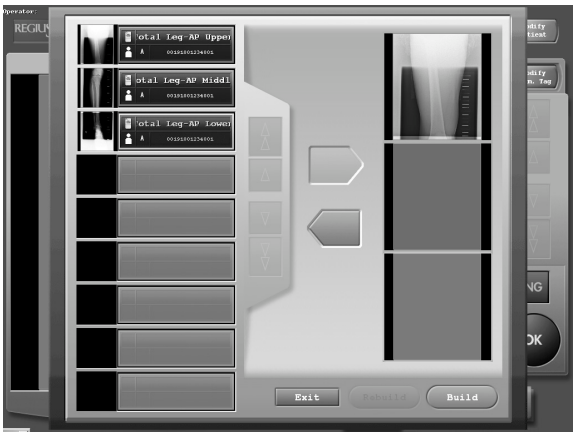
Image stitching process (composite image) cannot be applied to the images on the other Consoles being referred to or to the images exposed in high resolution.

Composite Image Select Screen

Images to be stitched can be selected from the exposed exam order using this screen.



[Stitch] button appears only when the examination is made using the examination tag key for long body parts.



Order List

Orders before stitching and after stitching are listed in the form of buttons.

Touching the order button will select itself and change its frame to green.

One order will be added to the list for the image that has been composited by stitching.

- **Maximum 9 orders will be displayed in the list. For more than 10 orders, scroll the list using the scroll button.**

Scroll [△ · ▽] Button

Scrolls the list by one order.

Scroll [⧋ · ⧊] Button

Scrolls the list by 9 orders.

[Add/Reset] Button

While the order is being selected, touch the [Add] button (blue, right arrow) to register the selected order (green frame) for composite image (stitching). Touch the [Reset] button (purple, left arrow) to cancel the registration of the selected order (green frame) from registration for composite image (stitching).

When the order in the order list, created by stitching is being selected, [Add] button (blue, right arrow) will not appear.

Composite Image Display

Images registered for composite image will be displayed.

[Exit] Button

Returns to the “Exam Check” screen after terminating the stitching process.

[Rebuild] Button

Readjusts the joint border of the images already stitched. This button is available only when the composite order is being selected in the order list.

• “Composite Image Adjust” screen will be displayed.

p.176 Composite Image Adjust screen

In the case where the screen is switched from the “Exam Check” screen to the “Composite Image Select” screen, and joint borders of the composite image that has been output are corrected using the [Rebuild] button, resulted composite image will not be registered in the output queue even returning to the “Exam Check” screen after completing modification. This happens because the image is recognized as “already printed”. To output such order, first exit or suspend the examination, then perform output using the “Image Reference” screen invoked from the “Exam History” screen.

[Build] Button

Adjust the joint border of the images registered and displayed in the composite image display. This button is available only when multiple images are registered for the display of composite image.

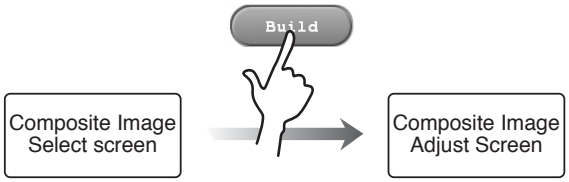
• “Composite Image Adjust” screen will be displayed.

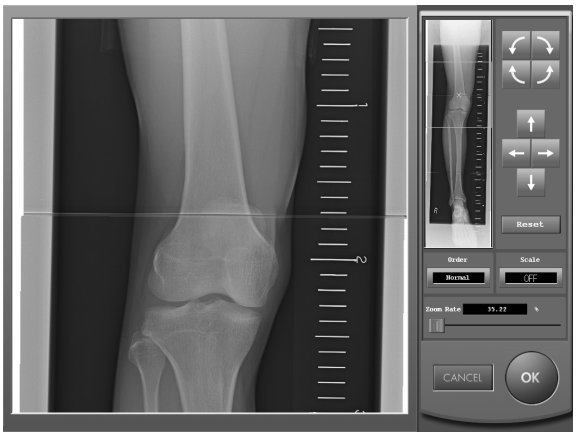
p.176 Composite Image Adjust screen

Stitching process is not completed only by registering the multiple orders for the display of composite image. It will be stitched and become effective when the [Build] button is touched and the “Composite Image Adjust” screen is displayed.

Composite Image Adjust Screen

Adjusts the position of joint borders of the images selected in the “Composite Image Select” screen.





Enlarged Stitched Image

Enlarges and displays the image area selected (framed in blue) in the “Whole Stitched Images” screen. Magnification may be set using the zoom slider.

Whole Stitched Images

Select in the “Whole Stitched Images” the area that shall be enlarged and displayed. The area enlarged is indicated with the blue frame. The size of the blue frame changes by the setting of zoom slider.

[Rotate] Button

Touching this button will rotate the image. Lower image in the “Whole Stitched Images” will be rotated. There is a limit for rotation, and rotation along the arrow direction beyond this limit is not possible.

Relation between the [Rotate] Button and Rotation Direction

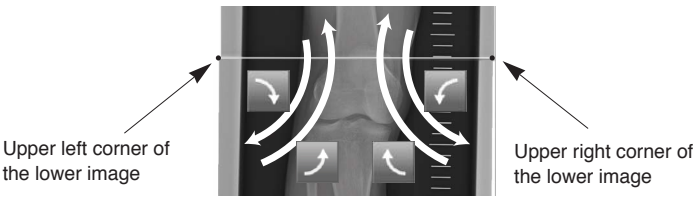
Touching each button will rotate the image as follows;

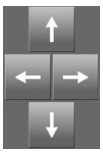
: Rotates counterclockwise with the center positioned at the upper right corner of the lower image.

: Rotates clockwise with the center positioned at the upper right corner of the lower image.

: Rotates counterclockwise with the center positioned at the upper left corner of the lower image.

: Rotates clockwise with the center positioned at the upper left corner of the lower image.





[Move Button] (↑ ↓ ← →)

Moves the image up/down or right/left.
Lower image in the “Whole Stitched Images” moves.
There is a limit (40mm) for move, and move along the arrow direction beyond this limit is not possible.

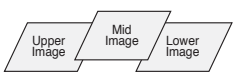
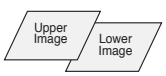
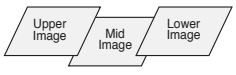
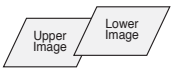
[Reset] Button

Resets the image positioning, and restores the original image position as the automatic stitching is completed.

[Order] Button

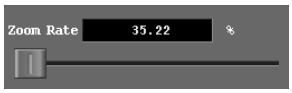
Changes overlapping order of the images.
Selecting the “Normal” simulates the overlapping of the plates set in the long body part cassette. Selecting the “Reverse” allows overlapping of the images in the opposite way as the plates are overlapped.

Relation between the Plate Positions overlapped in the Long Body Part Cassette and the [Order] button.

[Order] Button Setting	3 plates	2 plates
Normal		
Reverse		

[Scale] Button

Select whether to attach a scale to the long body part image or not .



Zoom Slider

Changes the magnification of composite image by dragging the slider to the right and left.
Dragging to the left decreases the zoom rate (smaller).
Dragging to the right increases the zoom rate (larger).

[CANCEL] Button

Cancels the composite image adjustment.

- **Returns to the "Composite Image Select" screen.**

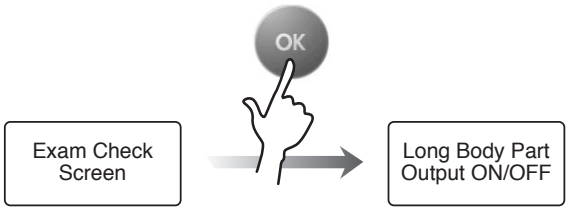
[OK] Button

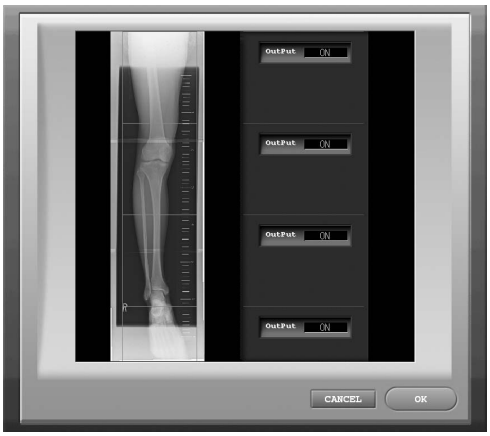
Saves the setting made by composite image adjustment and exits the screen.

- **Returns to the "Composite Image Select" screen.**

Long Body Parts Output ON/OFF Screen

In the case where the long body part is divided into segments and printed, selects whether or not to print each segmental image.





Output ON/OFF Button

Sets whether to output the image or not with this button.

[OK] Button

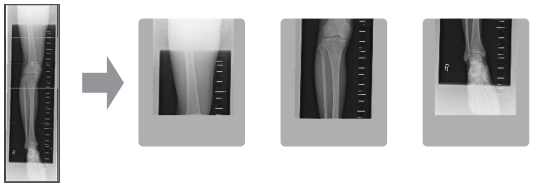
Output the image according to the setting made by "Output ON/OFF" button.

[CANCEL] Button

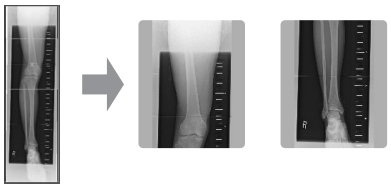
Cancels the image output.

"Tiling at Plate Border" and "Tiling by Film Size"
In the case where the long body part is output in the same size, there are two ways to output, one is "Tiling at Border" and the other is "Tiling by Film Size".

Tiling at Border : Divides the image at the borders of the plates. In this way of output, stitch borders tend to be less represented in comparison to "Tiling by Film Size".
(With this process, the image is always positioned in the center.)

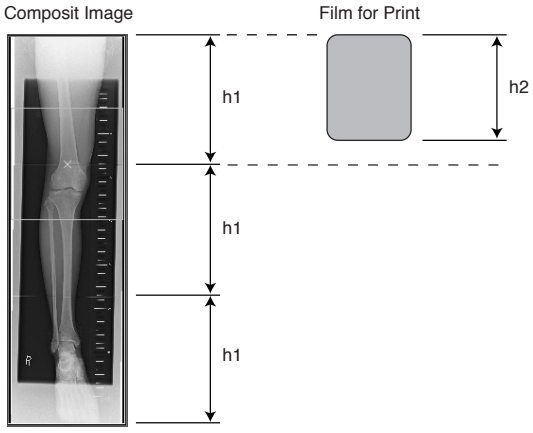


Tiling by Film Size : Divides the image to fit to the output film size. In this way of output, film sheets to be output may be less than the sheets for "Tiling at Border".



On the CS-3 that is set to "Tiling at Border", [Trim Adjust] button becomes invalid when the divided image is smaller than the film size. [Trim Adjust] button becomes valid when the divided image is larger than the film size.

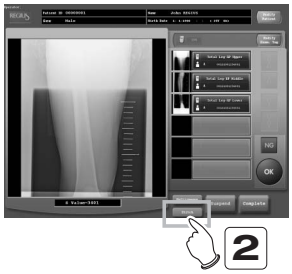
On the CS-3 that is set to "Tiling at Border", a message "Unable to tile due to insufficient film size. Switches to Tiling by Film Size" will be displayed when the longer side of the film ("h2" in the diagram) is shorter than the distance between the borders ("h1" in the diagram), and the output is made by using "Tiling by Film Size".



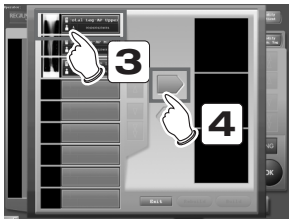
Stitching the Images

Procedures to stitch the long body part images are described below.

1 Insert and read all cassettes for long body parts on the reader.

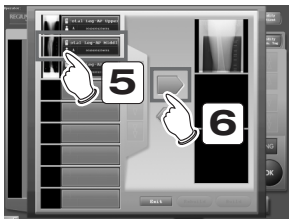


2 Touch the [Stitch] Button.
- **"Composite Image Select" screen will be displayed.**



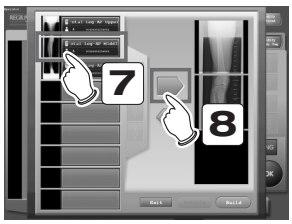
3 Touch the order name that should be allocated in the top of the composite image.
- **Frame of the order changes to green.**

4 Touch the [→]Button.
- **The image will be allocated in the top of the composite image.**



5 Touch the order name that should be allocated in the middle of the composite image.
- **Frame of the order changes to green.**

6 Touch the [→]Button.
- **The image will be allocated in the middle of the composite image.**

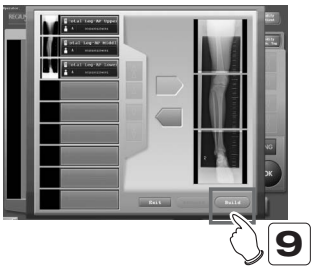


7 Touch the order name that should be allocated in the bottom of the composite image.
- **Frame of the order changes to green.**

8 Touch the [→]Button.
- **The image will be allocated in the bottom of the composite image.**

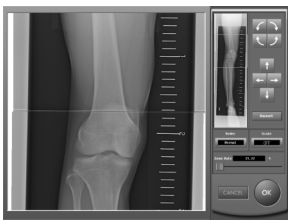
For the composite image comprised of two images only, step 7 & 8 are not necessary.

Stitching process is not completed only by registering the multiple orders for the display of composite image. It will be stitched and become effective when the [Build] button is touched and the "Composite Image Adjust" screen is displayed.



9 Touch the [Build] Button.

- **"Composite Image Adjust" screen will be displayed after a message "Stitching images... Please wait for a moment" is displayed.**

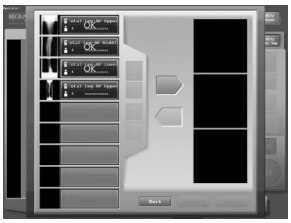


10 Adjust the borders of the images.

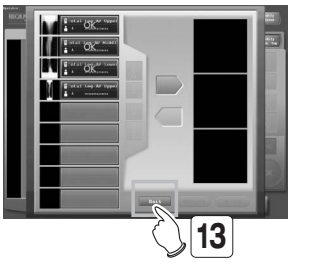
11 Touch the [OK] Button.

- **Composite image will be displayed after a message "Save stitched image... Please wait a moment" is displayed.**

12 Repeat step **3~11** when there are more images to be stitched.



Selecting the order for the image that has been stitched enables the [Rebuild] button. Touching the [Rebuild] button displays the "Composite Image Adjust" screen, enabling readjustment of the stitch borders of the images.



13 Touch the [Exit] Button.

- **Returns to the "Exam Check" screen.**

14 Touch the [OK] button after confirming the order for the stitched image that has been newly added.

- **Composite image will be output.**

Detailed data (image processing, print format, overlay) set to each image becomes invalid. Set the detailed data again to the orders after they are stitched.

Please note the limitation for the stitched images (composite image).

- Only "Original", "Flip", "180º Rotate" or "180º Rotate+Flip" is selectable.

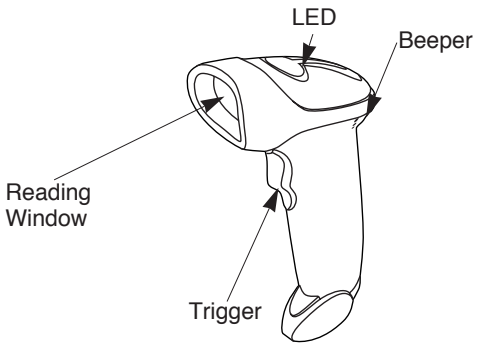
8

Operating the Optional Equipments

This chapter describes usage of optional equipments for the CS-3.

Single Bar Code Reader (Option)

The single bar code reader is used to read the bar code when registering a cassette into the REGIUS MODEL 170/190.
A description of audible (beep) tones and LED indications when scanning is set out below.



LED
Displays the single-bar code reader status.

Reading Window
The laser beam is output from this window.

Beeper
A tone is generated when the single-bar code reader power is switched on.

Trigger
When using a handheld bar code reader, pulling the trigger will initiate the laser beam from the reading window.

Types and Meanings of Beep

Beep Sequence	Meaning
3 high beeps (Pu, Po, Pi)	When the power is turned on or reset.
1 high and short beep (Pi !)	Barcode reading is successful. Note : Beep does not sound when it is disabled.
4 low and long beeps (Pu.., Pu.., Pu.., Pu..)	Data transfer error. • When the barcode to be registered already exists. • When failed to read the barcode. (Check the barcode reading angle or position)

Types and Meanings of LCD

LED	Meaning
Extinguished	Ready for reading. Power OFF.
Illuminated (Green)	Reading completed successfully.
Illuminated (Red)	Data communication error. Scanner malfunction.

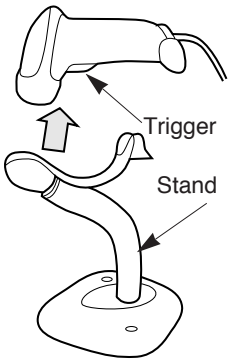
Using the Single Bar Code Reader

Usage of the optional single bar code reader is described below.

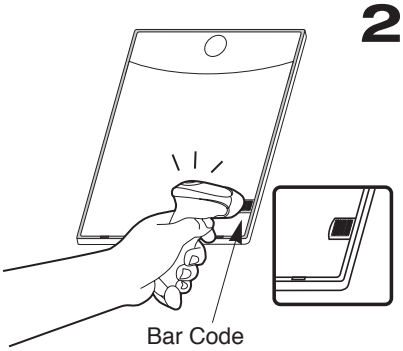
The single bar code reader is a CDRH Class II laser device.
The following cautions must be observed during usage.
Do not look into the reading window on the front of the device as the laser may cause damage to the eyes.
Do not direct the laser at the eyes of others as this may cause damage to the eyes.

Usage as a Hand Held Unit

The optional single bar code reader may be used either as a hand held manual unit (the unit is held in the hand) or on its stand (hands-free).



1 Remove the single bar code reader from its stand.



2 Direct the reading window of the single bar code reader to the bar code label on the cassette and depress the trigger.

- **Depressing the trigger will produce laser output to read the bar code.**
- **Successful completion of reading will be indicated by a short beep tone and illumination of a green LED indicator.**

3 Release the trigger and return the bar code reader to its stand.

Do not read the bar code label until CS-3 has been started up. Doing so may result in operational error.
In the event of error, the CS-3 should be restarted.

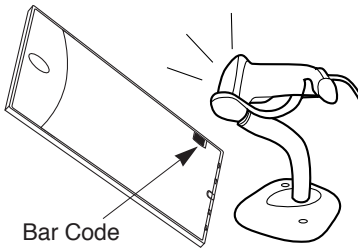
The bar code may be read either from the top or the bottom of the cassette.

There are cases where the device may fail to read the bar code if the laser is directed to the bar code at right angles. If the device fails to read, try again with the bar code reader tilted slightly at an angle.

When the barcode is not exposed to the barcode reader for a certain time, the barcode reader enters energy saving mode. (beam oscillation becomes smaller)
Bring the barcode closer to the area where the beam hits to start barcode reading again. It restores the normal operation.

Hands-free Usage

When the bar code reader is set into its stand, laser outputs continuously: thus bar code reading may be carried out at any time without using the trigger.



1 Hold the bar code label on the cassette in front of the reading window on the bar code reader.

- **Since laser outputs continuously, the reading process commences automatically.**

2 Hold the cassette so that the bar code label of the cassette is placed against the single bar code reader.

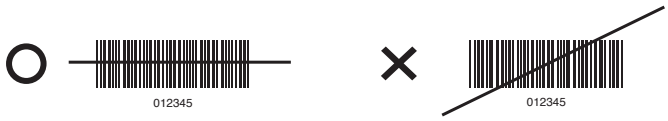
- **Reading starts.**
- **Successful completion of reading will be indicated by a short beep tone and illumination of a green LED indicator.**

When the device is in the stand, laser outputs continuously.

The bar code may be read from the top or the bottom of the cassette.

When using the bar code reader with a hands-free mode, the laser outputs continuously. Be sure to avoid that the laser is radiated into eyes directly.

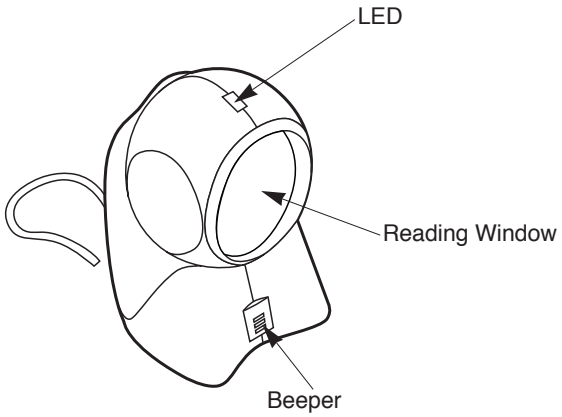
When reading the bar code, ensure that the laser scanning line crosses all the bars and spaces.



When the laser beam hits the bar code surface at right angle, it may fail to read properly. If failed, slightly incline the bar code reader, and try to read again.

Multi Bar Code Reader (Option)

The Multi bar code reader is used to read the bar code when registering a cassette into the REGIUS MODEL 170/190.
A description of audible (beep) tones and LED indications when scanning is set out below.



LED
Displays the multi-bar code reader status.
In the normal operational status, the green LED illuminates. The red LED illuminates to indicate that the bar code has been correctly read.

Reading Window
The laser beam is output from this window.

Beeper
A tone is generated when the multi-bar code reader power is switched on.

Types and Meanings of Beep

	Beep Sequence	Meaning
Starting up Beep will come from the beeper.	1 beep	When starting up
Normal Useage Beep will come from the CS-3 operation unit.	1 short high beep high - low - high - low alterrnately.	Completion of bar code reading. - The bar code is already registered. - Bar code read operation failure. (Check the reading position.)

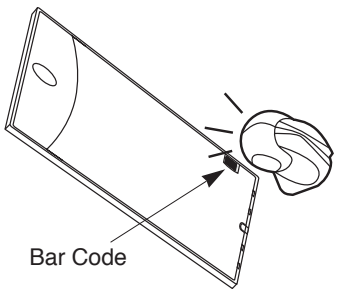
Types and Meanings of LCD

LED	Meaning
Extinguished	Power OFF.
Illuminated (Green)	Reading for reading.(Laser output)
Illuminated (Red)	Reading completed successfully.

Using the Multi Bar Code Reader

Usage of the optional multi bar code reader is described below.

The multi bar code reader is a CDRH Class II a laser device.
The following cautions must be observed during usage.
Do not look into the reading window on the front of the device as the laser may cause damage to the eyes.
Do not direct the laser at the eyes of others as this may cause damage to the eyes.



1 Hold the bar code label on the cassette in front of the reading window on the bar code reader.

The multi-bar code reader is capable of reading bar codes from all directions.
Note that the head may be tilted 30 degrees.

9

Care & Maintenance

This chapter details the procedure for care and maintenance of the CS-3.

Care & Maintenance

Inspections to be carried out periodically and the schedule for it are described below.

1) Checking the operation of the cooling fan.

Ensure that the cooling fan operates normally and does not generate any abnormal noise.
Periodically clean the exhaust slot of the cooling fan with a vacuum cleaner.

2) Checking the time displayed by the built-in clock.

The built-in clock can be checked and adjusted through the user tool.
Periodically check the built-in clock, consulting with an User Tool administrator.

3) Cleaning the CS-3 Operation Unit (monitor).

Periodically clean the CS-3 Operation Unit (monitor), by following the cautions below.

- Wipe the monitor with a soft cloth.
- Do not use a cloth dampened with chemical or water.
- Do not pour any water or liquid directly on the monitor.

4) Cleaning the bar code reader.

Periodically clean the reading window of the bar code reader, by following the cautions below.

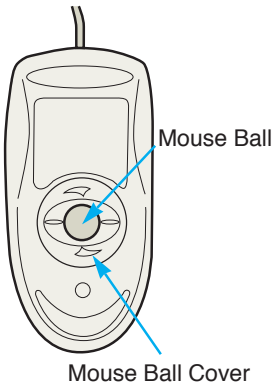
- Do not use an abrasive for cleaning the reading window.
- Remove a stain or dust with a moistened cloth.
- Wipe the reading window with a tissue dampened with ammonia or water.
- Do not pour any water or liquid directly on the reading window.
- Do not remove the rubber scanner nose from the single barcode reader.

5) Cleaning the keyboard.

Ensure that the whole systems including the peripheral devices are turned OFF (Power indicator is extinguished) to wipe the surface of the keyboard with a dry cloth.

6) Cleaning the mouse.

<Ball Type>
The mouse ball should move smoothly so that the mouse can work normally. Be sure to use the mouse in a clean room in order to avoid dust from accumulating on the mouse ball and periodically clean it by following the procedure below.

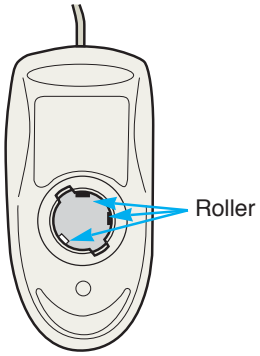


1 Ensure the power of the device is turned OFF (power indicator is extinguished).

2 Reverse the mouse and turn the mouse ball cover counterclockwise to take out the mouse ball.

3 Wipe the mouse ball with a dry soft cloth to remove dust or stain on it.

- **If the stain is stubborn, wipe it with a cloth dampened with warm water or neutral detergent thinned with water.**



4 Wipe the 3 small rollers in the mouse with a cotton swab.

- **If the stain is stubborn, wipe it with a swab dampened with alcohol.**

5 Return the mouse ball in the mouse.

- **If the mouse ball or small roller is cleaned with a dampened cloth or swab in the step 3 or 4, be sure to dry the mouse ball sufficiently before returning it in the mouse.**

6 Return the mouse ball cover to its original position and turn the cover clockwise to lock it.

<Optical Type>
To ensure the function of the optical-type mouse, the built-in optical sensor needs to correctly sense the moving direction and distance. Use the mouse in the low-dust environment to protect the dust from sticking on the sensor. Periodically clean the mouse with a dry cloth.

Care & Maintenance Schedule

Following maintenance cycle is for reference only; it may differ depending on the usage.

Maintenance by User

Maintenance Task \ Frequency		Weekly	Monthly	Remarks
1)	Checking the operation of the cooling fan.	●		
2)	Checking the time displayed by the build-in clock.	●		
3)	Cleaning the CS-3 operation unit (monitor).	●		
4)	Cleaning the bar code reader.	●		Option
5)	Cleaning the keyboard.		●	
6)	Cleaning the mouse.		●	

Other Maintenance by Qualified Personnel Only

Maintenance task	Frequency	Remarks
Replace the hard disk	Once every five years or every 20,000 operating hours	
Backup the system	Every six months	

Above maintenance is the service included in Maintenance Contract.
Please contact your technical representative for the actual services.

Specifications

Specifications

CS-3

Product name	REGIUS Console CS-3
Code No.	0862
Image Processing	Automatic gray-scale processing, frequency processing, equalization processing, hybrid processing
Memory for Image Storage	20 GB or more
I/O port	Ethernet 10base-T/100base-TX/1000base-T (Standard X 1)
Image Output	
Host	Normal 3ch, Backup 1ch (simultaneous output : max 3ch)
Printer	Normal 2ch, Backup 1ch (simultaneous output : max 1ch)
DICOM Support	Storage SCU, Basic Grayscale Print Management SCU, Modality Worklist Management SCU, Modality Performed Procedure Step SCU
Operating Condition	10 ~ 35˚C/8 ~ 80RH% (no condensation)
Transportation/ Storage Condition	–10 ~ 40˚C/10 ~ 95RH% (no condensation)
Accessories	Control Unit power cable, Operation unit power cable, Control Unit/Operation Unit connecting cable (several), Keyboard, Mouse, Operation manual, Hardware user's manual
Options	Upright Reader control interface (number of readers controlled: Upright Reader x 1 unit), Ethernet port (1000base-T), Barcode reader (single and multi) for cassette registration

Option

Bar Code Reader (Single bar code reader)

Barcode Reader Unit

Product name	BH2104 - K01
Interface	USB Ver. 1.1
Light Source	Visible Laser Diode 650nm
Laser Class	Conforms to CDRH Class II
Readable Code	Code128
Max. Readable Length	190 mm
Min. Readable Length	0.13 mm
Dead Zone	Beam axis +/-6°
Power Source	4.5 ~ 5.5 VDC (Voltage at connector) Normal Operation : Max.350 mA (5.5VDC)
Consumption Current	Ave. 130 mA Idling : Max. 50 mA
Heat Generation	Max. 1.75 W Ave. 0.65 W
Resistance to Shock	Normal reading is secured even after it is dropped from 1.5m height. (with cable) (after 10 drops on the plastic floor at random angle)
Operating Temperature	0 ~ 50 ℃
Storage Temperature	-40 ℃ ~ 60 ℃
Humidity	5 % ~ 95 %RH (no condensation)
Dimensions	152 (H) x 63 (W) x 84 (D) mm
Weight	146 g (without cable)
Cable Length	72 mm (with connectors)

Desk Stand

Dimensions	BS9019 - K01
Weight	250 (H) x 151 (W) x 170 (D) mm (without projected part)
Cable Length	193 g

Bar Code Reader (Multi bar code reader)

Product name	MS 7120 Orbit
Interface	RS232C
Light Source	Visible Laser Diode
Readable Code	Code 128
Safety Standard	IEC825-1
Max. Laser Output Power	1.0mW
Laser Wavelength	630nm ~ 680nm
Max. Readable Length	130mm
Resolution	0.13mm
Power Source	5.2 VDC
Current Consumption	220mA
Resistance to Shock	Normal reading is secured even after it is dropped on the concrete ground from 1.0m height.
Operating Temperature	0 ~ 40℃
Storage Temperature	– 40 ~ 60℃
Humidity	5 ~ 95%RH
Dimensions	80(W) x 105(D) x 150(H) mm
Weight	380g (without cable.)

These specifications are subject to change without notice due to continual improvements.

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⚠ Mammo Use is not approved in the United States of America.

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